

NEW AND LITTLE-KNOWN GEOMETRIDAE.

BY LOUIS B. PROUT, F.E.S.

SUBFAM. HEMITHEINAE.

1. *Anisozyga diversifimbria* sp. nov.

♀, 28–31 mm. Near *griseonotata* Warr., but of a slightly more vivid green, the white dorsal spots of mesothorax and abdomen larger.

Forewing with the red-brown costal edge on an average broader than in *griseonotata*; the purple-grey shades entirely wanting, except that a rather conspicuous hindmarginal white spot at the end of the postmedian is proximally and distally grey-edged; white terminal dots larger than in *griseonotata*; fringe strongly spotted with red-grey opposite the veins.—*Hindwing* with corresponding distinctions, except costally; hindmarginal postmedian white spot rather larger, only proximally with a slight grey edging.

Underside less noticeably dotted with white than in *griseonotata*, the bright green costal part of forewing more extended and perhaps more vivid.

British New Guinea: Hydrographer Mountains, 2,500 feet, June 1918 (Eichhorn Bros.). 3 ♀♀ in coll. Tring Museum.

Recalls a small ♀ of *A. speciosa* T. P. Luc., but belongs to the other structure-group, with the discocellulars excessively oblique posteriorly and M¹ of the hindwing widely separate from R³. The ♂ will probably prove similar, as in the case of *griseonotata*.

2. *Archichlora trygodes* sp. nov.

♂, 25 mm. Head and body predominantly pale flesh-colour, in parts (especially vertex and front of thorax) with a very pale vinaceous tinge; face and pectus in front redder; patagia and tegulae, together with subdorsal spots at base of abdomen, green. Palpus minute. Tongue wanting.

Forewing narrower than in the *viridimacula* group, thinly scaled, recalling a *Trygodes*; M¹ just separate (almost connate); very pale vinaceous, in parts (especially at base and costally) shaded with flesh-colour; costal edge deeper flesh-colour, spotted (especially in distal part) with greenish black-grey; cell-mark somewhat angular, deep flesh-colour; a large, rather elongate green spot in middle of cell, confluent in its proximal half with a larger posterior one, which reaches hindmargin; two green spots midway between DC and termen, the anterior terminating just behind R¹, the posterior commencing just before R³, narrow in front, broader behind, not quite reaching M¹; shadowy traces of a line beyond, broadening posteriorly into a large diffuse ill-defined greyish tormal shade; all the green spots with some black scales at their edges; terminal line brownish, broadening irregularly into spots or dots between the veins; fringe with some red-brown spots opposite the veins, stronger posteriorly, the tormal part (nearly to M²) almost entirely red-brown.—*Hindwing* with termen erenulate, the tooth at R¹ long, the excision between this and R³ deep; M¹ separate; concolorous

with forewings, the outer line more distinct, more proximal, almost the entire area beyond (excepting three small terminal patches between SC^2 and R^3) darkened with violet-grey; the green mark in middle of cell less elongate than that of forewing, the posterior one curving and running along abdominal margin almost to the outer line; no outer green spots.

Underside with the green markings shadowy; outer line and shades stronger and darker than above, but remaining subterminal throughout (though thick posteriorly and on hindwing), only connected with termen by the darkening of the veins.

Madagascar: Diego Suarez, July 2, 1917 (G. Melou). Type in coll. Tring Museum.

Probably nearest to *devoluta* Walk., but very distinct, remarkably reminiscent of a tiny *Trygodes musivaria* H.-Sch.

3. *Archichlora engenes* sp. nov.

♂, 27-30 mm. Face dull black. Palpus minute; blackish, beneath rufous. Vertex and antenna pale rufous, irrorated (at base of antenna very thickly) with black. Pectinations long. Thorax and base of abdomen above green; body otherwise whitish brown with some admixture of ochreous; abdomen above also with some rufous shading and a very slight sprinkling of black-grey scales; only the first abdominal crest developed.

Wings formed about as in *Bathycholpodes*, hindwing with slight basal expansion but with well-developed frenulum.

Forewing with SC^1 free, DC very deeply inbent, R^1 just stalked, M^1 separate; bright green, with costal margin as far as SC fleshy to rufescent, with black-grey irroration; antemedian line indicated by a very small pale spot on fold at one-third and a slightly more distal one at hindmargin, both partially edged with black-grey irroration; distal border irregularly pale (whitish buff with slight fleshy tinge), about 2 mm. wide (but in three lobes, the middle one the smallest) between apex and R^3 , then very narrow, almost linear, expanding again behind M^2 into a hindmargin patch at least 3 mm. long; this patch with some pale olive-brown proximal and black-grey central shading; a terminal line of blackish interneural lunules, the anterior four short, well separated (that between apex and SC^2 almost obsolete); fringe pale proximally, with dark mottling distally.—*Hindwing* with M^1 separate; bright green, with costal margin pale; distal border coloured much as on forewing but with more copious dark irroration; its anterior part narrow at apex, widening to R^3 , separated from ground-colour by a thinly-scaled white patch; its tornal part very small, triangular, with apex of triangle on fold.

Underside whitish green; costal area of forewing light ochreous brown, pale border shadowy but containing conspicuous blackish-fuscous tornal patch and terminal dots; hindwing also with shadowy borders and conspicuous terminal dots, but with a dark submarginal half-band from apex to radial fold instead of a tornal blotch.

Madagascar: Diego Suarez, April 24, 1917 (G. Melou). Type in coll. Tring Museum. Several other ♂♂, April, May, and August.

Somewhat anomalous in structure, nearest to *A. trygodes* Prout (*supra*). Much like a heavily pectinate *Bathycholpodes*; the coloration of the upperside recalls *B. subfasciata* Warr., while the shape of the wings and the underside are more as in *B. anisotes* Prout.

4. *Bathycolpodes melanceuthes* sp. nov.

♂, 24 mm. Head black, with a very narrow liver-coloured band between the antennae. Palpus minute, beneath liver-coloured. Tongue very slight. Antennal ciliation very short (scarcely one-half). Thorax and base of abdomen above ochreous (probably discoloured from green), the rest of abdomen above mostly black; underside of body greyer.

Forewing with termen rather deeply excavated between SC^5 and R^3 , very strongly oblique posteriorly; black, with a small green proximal patch from SC to hindmargin, measuring nearly (at hindmargin more than) one-third of the wing-length, but with its distal edge slightly concave in cell and more deeply between base of M^2 and SM^2 .—*Hindwing* similar.

Underside less deep black, more brownish, the forewing with the costal margin (at base narrowly, at apex broadly) and the hindmargin (irregularly) dull rosy, a pale line at base of fringe in the excavation, scarcely continued posteriorly.

Cameroons: Bitje, Ja River, September. Type in coll. Deutsch. Ent. Museum, received through A. Heyne; paratypes in coll. Joicey.

Near *semigrisea* Warr. (Nov. Zool. iv. 38), but with termen of forewing rather more oblique posteriorly, the colouring black, not brown or drab (even on the underside blacker), the costal margin beneath reddish, not ochreous. It is very unlikely to be a local form, as *semigrisea*—described from the Congo—occurs without geographical modification in Ashanti.

5. *Perithalera oblongula* sp. nov.

♂, 27–28 mm. General coloration and markings as in the genotype (*oblongata* Warr., from West Africa), but differing in some structural and other details.

Forewing with termen rather less strongly ventricose, SC^1 arising from stalk of SC^{2-5} , SC^2 well away from SC^1 , R^1 just separate at origin from the subcostals; cell-dot smaller; the faint crenulate lines more noticeable than in Warren's type, the postmedian ending in a red dot on hindmargin.—*Hindwing* with termen less strongly ventricose than in *oblongata*, bent at R^3 but not noticeably at R^1 ; M^1 connate; cell-dot very small; postmedian as on forewing.

Madagascar: Diego Suarez, January 8 (type) and January 16, 1917 (G. Mclou). In coll. Tring Museum.

The abdomen shows—especially in the paratype—a dark dorsal blotch on the second and third somites.

6. *Heterorachis trita* sp. nov.

♂, 20–22 mm. Face and palpus burnt carmine, sometimes more mixed with black; palpus minute. Tongue very short and slender. Vertex whitish; occiput green. Antenna cream-colour; pectinations rather long. Thorax and abdomen nearly as in *melanophragma* Prout (*Ann. Mag. Nat. Hist.* (9) i. 314), abdomen less irrorated with black. Hindtibia not dilated.

Forewing with SC^1 anastomosing with C^1 , R^1 not stalked, R^2 arising very near R^1 , M^1 not stalked; French green; costal margin cream-colour, tinged with red proximally; lines wanting; cell-dot wanting or very faint; termen marked as in *carpenteri* Prout (Nov. Zool. xxii. 321); fringe reddish, proximally with strong black irroration.—*Hindwing* with termen bent; C^1 anastomosing with SC at a

point near base, rather rapidly diverging; R^2 arising very near R^1 , M^1 separate (not remote); as forewing, except costal margin.

Underside much paler green, the forewing suffused with reddish, except distally and posteriorly; an indistinct, interrupted dark terminal line; fringe vaguely spotted.

Madagascar: Diego Suarez (G. Melou), April, July, and September 1917. A long series in coll. Tring Museum.

7. *Heterorachis tornata* sp. nov.

♂, 15–18 mm; ♀, 20–21 mm. Similar to the preceding but smaller, at least in the ♂. Face more mixed with black. Vertex and base of antenna reddish.

Forewing with M^1 connate; costal margin fleshy or reddish, with some black irroration; an appreciably darker green cell-dot; border broadening behind SM^2 into a small tornal blotch.—*Hindwing* with M^1 connate or shortly stalked; cell-dot as on forewing; border broadening slightly anteriorly.

Madagascar: Diego Suarez (G. Melou), May–September 1917. 5 ♂♂, 2 ♀♀, in coll. Tring Museum.

8. *Heterorachis* (?) *diphrontis* sp. nov.

♂, 19–23 mm. Face deep red. Palpus minute, shortly rough-haired, deep red. Tongue vestigial. Vertex and base of antenna red; pectinations moderate. Thorax above green. Abdomen buff, above strongly mixed with red; crests red. Foreleg reddened above and on inner side.

Forewing decidedly narrower than in typical *Heterorachis*; SC^1 anastomosing with C, SC^{2-5} usually long-stalked (variably), R^1 just separate, R^2 from very near R^1 , M^1 separate; bright green (rather less bluish than in *despoliata* Walk.); markings deep flesh-pink; a moderate anterior border, more deeply coloured at costal edge; sometimes a small cell-spot; an ample, irregular distal border, separated from the ground-colour by a sinuous darker brown-red line; width of border in front of R^1 about 1 mm., then a little broader to M^1 , behind which it widens suddenly, so as to approach or sometimes even reach the base of M^2 ; terminal line and proximal part of fringe deeper flesh-colour.—*Hindwing* not very broad, termen rounded; C shortly approximated to SC near base, SC^2 shortly stalked, R^2 from near R^1 , M^1 separate; concolorous with forewing; a patch of flesh-colour on proximal part of abdominal margin, variable in size; costal border widening distally; distal border broad anteriorly, narrowing posteriorly, its proximal edge somewhat sinuous.

Underside dull ochreous, the forewing flushed with red at base of costa and in a broad, ill-defined longitudinal shade behind middle.

♀, 26–29 mm., the borders broader, that of the forewing in one example confluent with an enlarged cell-spot.

Madagascar: Diego Suarez (G. Melou). A long series of ♂♂ (variable in the extent of the markings) and 2 ♀♀, in coll. Tring Museum.

Differs from typical *Heterorachis* in the obsolescent tongue and in some details of venation; perhaps an independent development of the *Hypocoela-Bathycolpodes* group.

9. *Heterorachis* (?) *insueta* sp. nov.

♂, 21–24 mm. Face yellow-green. Palpus fully 1, second joint with appressed scales, third joint short but distinct; whitish buff above and at tip red-brown. Tongue strong. Vertex and base of antenna white; shaft of antenna rather broad, pectinations moderate. Thorax above dull green, beneath whitish. Abdomen not appreciably crested; pale. Hindtibia dilated, with hair-pencil.

Forewing with SC¹ anastomosing shortly with C, R¹ just separate, M¹ separate; not very densely scaled, dull pale blue-green, with close darker green irroration; costal edge narrowly pale buff; cell-dot black; lines not conspicuous, more yellowish green; antemedian angled outward at folds, inward at M and SM²; postmedian wavy anteriorly, nearer to termen than to cell-dot, behind M² incurved; white vein-dots at distal edge of postmedian; terminal line very fine, blackish, interrupted; fringe duller, paler green, with a whitish line at base.—*Hindwing* with abdominal margin fairly long, termen slightly waved, weakly bent at R³; C very shortly approximated to SC near base, rapidly diverging, SC² connate or barely stalked, M¹ well separate; antemedian line wanting, the rest nearly as on forewing; a very slight additional (greyish) cell-dot on DC².

Underside whitish green; forewing with costal area ochreous, cell-dot blackish, interrupted terminal line grey; hindwing almost unmarked.

Madagascar: Diego Suarez (G. Melou). 4 ♂♂ in coll. Tring Museum, the type dated September 10, 1917.

The only ♀, dated June 24–26, 1917, is very remarkable in being pale purple, with the irroration dark brownish purple, the green lines showing up more strongly by contrast. It is unfortunately in poor condition, but it is hard to believe that the change of colour is artificial, as it is no different from the normal changes in the fugitive Hemitheine greens and is quite uniform. The palpus is scarcely longer than in the ♂, the pectinations short (the longest little over 1), the hindtibial spurs rather approximated, SC¹ of the forewing free.

10. *Diplodesma xanthochlora timida* subsp. nov.

♂, 15–16 mm. Very much smaller than *x. xanthochlora* Swinh., distal margins with the excisions slightly shallower.

Forewing with basal patch more restricted.—*Both wings* with cell-spot smaller; band beyond postmedian less broad.

Underside with cell-spots and proximal dark shades wanting.

Portuguese Timor: Suai, December 1912 (E. Wahr). 3 ♂♂ in coll. Tring Museum.

Perhaps a good species. At first glance it recalls *cclataria* Walk., but the short antennal ciliation, non-dilated hindtibia, non-anastomosis of SC² of forewing, and deeply sinuate postmedian line reveal its true position.

11. *Lophostola atridisca cumatilis* subsp. nov.

♂, 29 mm.; ♀, 36–39 mm. Bluer green than *a. atridisca* Warr., from Natal, the cell-spots larger, white vein-dots more strongly developed, termen in addition with white dots at vein-ends.

Madagascar: Ambinandrano, 50 km. W. of Mohanoro (G. K. Kestell-

Cornish), February 1913; type ♂, November 14, 1916, and August 3 (? year); 2 ♀♀ in coll. Tring Museum; Tananarive, 1 ♀ in coll. Joicey.

Doloma gen. nov.

Face smooth. Palpus moderate, second joint shortly rough-scaled, third joint in ♂ rather short but distinct (in ♀ probably elongate). Tongue present. Antenna in ♂ bipectinate to near apex, the last joints dentate and ciliate. Pectus moderately hairy. Femora slightly hairy. Hindtibia in ♂ not dilated, with two pairs of unequal spurs. Abdomen not crested. Frenulum wanting.

Forewing with costa slightly arched, apex acute, termen bowed, rather strongly oblique posteriorly; cell about two-fifths. DC curved, strongly oblique posteriorly; SC¹ from stalk of SC^{2,3,4}, anastomosing with C, R¹ well separate, R² from close to R¹, occasionally connate, M¹ separate.—*Hindwing* rather long, apex not sharp, termen slightly prominent at R¹, feebly sinuate between R¹ and R², strongly angled at R², then nearly straight to tornus; DC as in forewing; C touching SC at a point near base, rapidly diverging, SC² well stalked, R² and M¹ as in forewing.

Type of the genus: *D. leucocephala* sp. nov.

12. *Doloma leucocephala* sp. nov.

♂, 22–26 mm. Head and base of antenna white; palpus whitish, with a red-brown band on upper and outer side of first and second joints. Thorax pale green, paler beneath; abdomen almost white. Legs mostly white.

Forewing pale apple-green, inclining to olive-yellow; costal edge cream-colour; cell-dot small or minute, red; lines slightly deeper green; antemedian subobsolete, curved, rather near cell-dot; postmedian obsolete at costa, strongly excurved between radials, then straightish, posteriorly slightly less oblique than termen; at hindmargin sometimes marked with some red scales; terminal line dark red, slightly or scarcely interrupted at the veins; fringe white, strongly spotted with red at the veins.—*Hindwing* similar, without first line; postmedian bent, though rather less strongly than termen; cell-dot generally rather larger.

Underside whitish green; cell-dot generally indicated, at least on forewing, but feeble; terminal line and fringe-dots weaker than above.

Madagascar: Diego Suarez, April–June and September 1917 (G. Melou). A good series in coll. Tring Museum.

Oneiliana gen. nov.

Face smooth. Palpus in ♂ short, upcurved (appressed to frons), second joint with appressed scales, third joint very small; (in ♀?). Tongue developed. Antenna rather short, in ♂ bipectinate to about two-thirds, in ♀ almost simple. Pectus and femora hairy. Hindtibia in ♂ not dilated, in both sexes with all spurs. Abdomen in ♀ very robust, in both sexes with small (on posterior segments very small) crests.

Forewing with costa slightly arched near apex, apex moderate, termen nearly smooth, bowed, oblique; cell rather less than one-half, DC¹ incurved anteriorly, oblique outward posteriorly, SC¹ from near end of cell, anastomosing with C and sometimes with SC², SC³ stalked, arising before SC⁴, R¹ very shortly stalked, M¹ just separate.—*Hindwing* with moderate basal expansion, frenulum rather short in ♂, obsolete in ♀, apex not very pronounced, termen scarcely sub-

crenulate, strongly rounded in middle, very slightly bent at R^3 and scarcely appreciably at R^1 , tornus about rectangular, abdominal margin relatively rather long, cell nearly as in forewing, shortly approximated to SC near base, rapidly diverging, SC^2 shortly stalked, M^1 connate or barely stalked.

Type of the genus: *Oneiliana multifera* sp. nov.

Unfortunately the ♀, otherwise in beautiful condition, has lost the palpi—a very useful character in the *Hemitheinae*; but whether they prove long or short, the species will fall into no known genus.

13. *Oneiliana multifera* sp. nov.

♂, 23 mm.; ♀, 33 mm. Face reddish. Palpus reddish brown above, white beneath. Vertex, postorbital rim, and base of antenna white; occiput very narrowly rosy behind. Thorax above red-brown, mixed with rosy-purplish, beneath white; abdomen above similarly coloured to thorax but somewhat mixed with violet-whitish scales, beneath yellowish; crests blackish, with whitish summit. Legs in part rosy, in part white; the hind nearly all white.

Forewing light ochreous-brown, with red-brown irroration and with ill-defined reddish clouding in median area; costal edge white, succeeded by a violet-mixed subcostal streak; no definite lines; markings whitish violet, irrorated with some rosy and some dark scales; a rather large subbasal patch (on hind-margin); a cell-spot; an irregular chain of terminal markings, consisting of a rather large patch between apex and R^3 (tapering to a point at apex and indented at SC^2), two small (shallowly triangular) spots between R^3 and M^2 and a moderately large, irregular patch from M^1 to tornus, proximally throwing out an anterior projecting across M^1 ; an ill-defined streak of denser irroration near the proximal edge of the last-named patch; a rosy, black-mixed terminal line; fringe white, irrorated with rosy and cut by darker markings opposite the veins.—*Hindwing* similar; subbasal and discocellular spots whiter, the latter much narrower; terminal marks rather differently arranged, being narrow between apex and R^1 , rather large between the radials (in the ♂ slightly, in the ♀ more deeply indented proximally at R^2), as in forewing between R^3 and M^2 , moderate at tornus, without projection across M^1 ; termen and fringe as on forewing.

Underside rosy whitish, with the markings of upperside faintly indicated; forewing with deeper rosy subcostal streak; termen and fringes as above.

Rhodesia: Shamva, December 1920. Type ♂ in coll. Brit. Museum, allotype ♀ in coll. L. B. Prout, both kindly presented by the Rev. Father O'Neil.

A very striking species.

SUBFAM. STERRHINAE.

14. *Anisodes seposita* sp. nov.

♂ ♀, 36–42 mm. Face dull rufous, narrowly whitish below. Palpus in both sexes long. Vertex and proximal part of antenna white. Abdomen dorsally vinaceous rufous in anterior half, whitish in posterior. Hindleg of ♂ not tufted, with terminal spurs only. Both wings with termen slightly more crenulate than in *globaria* Guen., about as in *ordinata* Walk. and *flavidiscata* Warr., termen of forewing slightly more oblique anteriorly than in these latter species.

Forewing coloured and marked as in *globaria*, or on an average slightly less red.—*Hindwing* also similar to that of *globaria*, the cell-spot variable, in the

type formed of a tolerably large black orb (1-1.5 mm. diameter) with a small white pupil, in aberrations of a less small yellow-tinged pupil surrounded successively by slender black, broad white and slender black rings (as in *flavidiscata*).

Forewing beneath less red or pink than in *globaria*, the aberration otherwise resembling that species on the underside, the type form in addition on each wing with a small blackish, white-pupilled cell-spot.

Peru: Cushi, prov. Huanuco, 1,820-1,900 m. (W. Hoffmanns). A series in coll. Tring Museum, including the type. Also from Huancabamba (near Cerro de Pasco) and Carabaya and from Cañon de Tolima (Colombia), Riobamba (Ecuador), and Chulumani (Bolivia).

The conspicuously two-coloured abdomen above is distinctive. The only other species of this group known to me with simple ♂ hindleg are *globaria* Guen. and *ordinata* Walk., the latter confined to Jamaica; in *flavidiscata* the femur is tufted, in *sypharia* Guen. (= *fimbripedata* Walk.) the whole tibia strongly fringed.

15. *Anisodes spadix* sp. nov.

♂ ♀, 33-38 mm. Palpus in ♂ with third joint over one-half, in ♀ about 1. Antenna in ♀ ciliate, the ciliation rather under one-half. Hindfemur and tibia of ♂ densely clothed with (predominantly cinnamon-rufous) hair, the tibia with terminal spurs only. Face and upperside of palpus and thorax coloured nearly as wings, abdomen becoming more purple-grey posteriorly; beneath predominantly cream-colour. Vertex pale-mixed. Tegulae and base of antenna deep purple-grey.

Forewing rather broad, termen curved, slightly waved, hardly more oblique than in *nodigera* Butl. (*Tr. Ent. Soc. Lond.* 1881, p. 334); areole moderate, SC⁵ variably stalked beyond it; rather variable in colour, cinnamon or vinaceous-cinnamon, usually (perhaps always in fresh specimens, at least of the ♂) sufficiently strongly irrorated with chestnut to produce a tone of hazel; costal margin dark purplish grey, at the extreme edge more olive-grey; markings dark olive-grey, not very sharp; antemedian excurved before middle, incurved behind middle, then oblique outward; cell-mark elongate, open, but very narrow, nearly as in some *nodigera* but without distinct blackish dots at its extremities; median and postmedian nearly as in *nodigera*, the former always well beyond cell-spot; a vague shade proximally to the (obsolescent) subterminal, slightly incurved between SC⁴ and R², where it is angulated outward and approaches termen, posteriorly more ill-defined and macular; terminal blotches of *nodigera* only faintly indicated; termen with blackish interneural dots; fringe with small blackish basal dots at vein, distal half paler.—*Hindwing* with termen erenulate, slightly angled at R², M¹ arising close to R²; concolorous with forewing and with similar markings, but with a small white, very finely dark-edged cell-dot.

Underside vinaceous-cinnamon, the forewing (except hindmargin) and the anterior part of the hindwing predominantly or almost entirely vinaceous, the hindmargin of both wings cream-colour; median, postmedian, and subterminal shades faintly indicated in darker, duller vinaceous; dots on termen and on fringe rather weak, vinaceous.

Upper Amazons (S. M. Klages): Fonte Boa, June 1906 (type ♂), May and July 1906, July and August 1907; Santo Antonio do Javary, May and June 1907. A short series in the coll. Tring Museum.

16. *Anisodes suspiciens* sp. nov.

♂ ♀, 32–34 mm. Structure nearly as in the preceding, third joint of palpus perhaps slightly shorter, antennal ciliation in ♀ shorter (less than one-third); forewing with termen slightly less oblique (as in a narrow-winged *nodigera*), slightly more crenulate; entire coloration paler. Lower part of face cream-colour. Vertex cream or buff. The cinnamon and hazel parts replaced by cream-colour, buff, or buff-yellow, with some dull vinaceous irroration. Tufts on hindfemur and base of tibia cream-colour, on rest of tibia mixed with vinaceous.

Forewing with nearly the markings of *spadix*; extreme costal edge similar, costal margin otherwise vinaceous; markings vinaceous; cell-mark with a dark anterior dot; subterminal shade less developed, less angled, marked with a pair of dark dots or spots between the radials and feebler ones anteriorly and posteriorly.—*Hindwing* with termen slightly less angled than in *spadix*, cell-dot with a less fine black circumscription.

Underside paler (especially on hindwing) and more variegated than in *spadix*.

Upper Amazons (S. M. Klages): Fonte Boa, type and 13 others; Santo Antonio do Javary, 2 ♀ ♀; taken together with preceding. In coll. Tring Museum.

17. *Anisodes itinerans* sp. nov.

♂ ♀, 28 mm. Smaller than *multipunctata* Warr. (Nov. Zool. xi. 509), from Peru, otherwise apparently indistinguishable except that the third joint of the palpus is in both sexes shorter, especially in the ♂.—In ♂ one-half second joint, against fully two-thirds in *multipunctata*; in ♀ barely longer than second joint, whereas in *multipunctata* ♀ it is appreciably longer than second joint. Thus it should be treated as a representative species rather than a race.

S.E. Brazil: São Paulo and Castro, Parana. Type from São Paulo in coll. Tring Museum.

18. *Anisodes (Perixera) orbiculata* sp. nov.

♂ ♀, 39 and 35 mm. Face reddish. Palpus in both sexes elongate, third joint long; deeper red on outer side, pale ochreous beneath. Vertex and base of antenna white; occiput reddish. Thorax and abdomen above concolorous with wings; abdomen in ♂ above showing four indistinct dark dots on the anterior segments, beneath whitish ochreous with rather brighter ochreous lateral hair-pencils. Hindfemur in ♂ with a purple-red curled tuft about as in *dotilla* Swinh. (*Tr. Ent. Soc. Lond.* 1894, p. 179), the tibia not (as in that species) shortened.

Forewing rather less broad than in *dotilla*, termen equally crenulate, rather more oblique; areole present; deep fawn, with very fine dark-grey irroration (rather less purplish than *dotilla*, more recalling some Neotropical species—between *globaria* Guen. and *flavidiscata* Warr.); costal edge very narrowly whitish; antemedian line almost obsolete, suggested by faint dark vein-dots; cell-spot round and black, about 1 mm. in diameter, with a minute white pupil; postmedian about 3 mm. from termen, slightly sinuous, consisting of black vein-dots; termen with blackish interneural dots; fringe with blackish basal dots at veins.—*Hindwing* with termen crenulate, but rather less deeply than in *dotilla*; as forewing, but with the cell-spot larger, nearly 2 mm.

Underside more fleshy-coloured, in the ♂ with the hindwing paler, in the

middle tinged with ochreous; both sexes with well-developed postmedian dots and very slight traces of cell-spot; terminal line continuous, slender.

Madagascar: Diego Suarez (G. Melou), July 8, 1917 (type ♂), and September 16, 1917 (♀). In coll. Tring Museum.

Very distinct from any African *Anisodes* hitherto known, in facies recalling the *globalia* group of South America.

19. *Hamalia dognini* sp. nov.

♂♀, 26 mm. Extremely like the darkest specimens of *grisescens* Warr. (Nov. Zool. xii, 46), but with the hindtarsus rather shorter, its first joint (which in both species is partly overlapped by the tibial pencil) considerably swollen. Wings still darker, the violet reflections stronger, both wings with a stronger blue-violet band between the subterminal shade and the terminal black lunules. Forewing with the median shade broader and more diffuse than the corresponding line of *grisescens*.

S. Peru: Chaquimayo, 2,500–3,000 ft., June–July 1910 (H. and C. Watkins), type ♂ in coll. Dognin; Rio Huacamayo, Carabaya, 3,100 ft., June 1904 (G. Ockenden), a pair in coll. Tring Museum.

20. *Somatina figurata transfigurata* subsp. nov.

Differs from *f. figurata* Warr. (1897) as follows:

Forewing with the shading in the terminal area weak or obsolete, cell-mark broader, almost as broad as long, its margins with a heavier admixture of black scales.—*Hindwing* with the cell-mark punctuated with black anteriorly.

Madagascar: Diego Suarez (G. Melou). A series in coll. Tring Museum.

21. *Scopula dimoera* sp. nov.

♂♀, 25–27 mm. Face deep brown. Palpus deep brown above, whitish beneath. Vertex whitish. Antenna of ♂ furnished, to beyond the thirtieth joint, with short pectinations, mostly about twice as long as diameter of shaft and surmounted by fascicles of eilia of about their own length. Thorax and abdomen pale ochreous-fleshy, the abdomen in the ♂ with a series of black subdorsal spots, on segments 1, 2, 6, and 7 small, on 3, 4, and 5 large. Fore and middle legs somewhat infuscated on upper and inner sides; hind leg of ♂ long and slender, with a pair of well-developed terminal spurs.

Forewing narrow, apex pointed, termen strongly oblique, little curved; pale ochreous fleshy, with fine black irroration; antemedian line extremely oblique, scarcely indicated except in a dash at hindmargin and a rather sharp black dot on M close to M²; cell-dot black, well beyond middle of wing; median shade broad, dark-grey mixed with red-brown, very oblique from about middle of hindmargin to postmedian at R¹, anteriorly obsolete; postmedian extremely fine, subobsolete, but marked with sharp vein-dots, slightly less oblique than termen posteriorly, more oblique anteriorly, thus angled at R¹; subterminal defined by faint or moderate greyish line on each side; termen with black interneural dots, which are sometimes faintly connected; fringe slightly chequered.—*Hindwing* rather narrow, costal margin long, apex rounded-prominent, termen weakly bent at R³, then straight to the prominent tornus; as forewing, but costal region whiter, unmarked (except at apex), first line wanting, median and postmedian straight.

Underside similar but more strongly irrorated, the proximal part of forewing suffused or blurred, the costal margin of hindwing less white, the postmedian of forewing sometimes traceable to costa (oblique inward from R').

S. India: Palni Hills (W. H. Campbell). Type ♂ and others in coll. L. B. Prout; also in other collections.

The ♀♀ seem to be more weakly marked.

Hampson (*Faun. Ind. Moths*, iii. 435) evidently misidentified this (from the Nilgiris) as *defamataria* Walk.; the true *defamataria* is a synonym, or slight modification, of *emissaria* Walk., with the ♂ antenna fasciculate but not pectinate. The new species should form, together with *anaïtaria* Walk. (which has also pectinate-ciliate ♂ antenna) a separate section, *in sensu Hampsoniano*, as they have clearly nothing to do with the more fully pectinate section *Induna* Warr. I prefer, however, to regard the difference from merely dentate-fasciculate antennae as here of quite secondary importance (a similar phenomenon being provided by the pectinate-ciliate *sordida* Warr. and the non-pectinate *walkeri* Butl.) and to keep them in the section *Lycauges* with the closely similar *emissaria* Walk., *donovani* Dist., etc.

22. *Scopula* (Pylarge) *neophyta* sp. nov.

♂, 21–23 mm. Face and palpus black. Vertex white. Antennal joints triangularly projecting; ciliation somewhat over 1. Collar brown. Thorax and abdomen slender; brownish white, with blackish irroration. Legs long and slender, the hindtibial spurs moderately long, especially the inner one.

Forewing rather elongate, apex moderately acute, termen straightish, oblique; cell slightly over one-half; white with a tinge of brown and with sparse blackish irroration; cell-dot black; lines brown, mainly parallel with termen; antemedian vague and diffuse, but marked with blackish dots on the veins, nearer to median line than to base; median line slightly incurved at costa, crossing the cell-dot or touching its outer side; postmedian slightly incurved at costa and very slightly between the radial and in submedian area, marked by coarse black dots on the veins (weakest posteriorly) and accompanied distally by an ill-defined brown band; subterminal line white, placed between vague brown shades; termen with sharp black interneural dots; fringe irregularly dark-spotted in centre opposite the veins.—*Hindwing* not broad, rather elongate costally, apex rounded, termen very slightly sinuous, not very strongly convex; SC² almost connate; white; cell-dot black; an ill-defined postmedian line of brown or blackish vein-dots, the last a little nearer termen, somewhat strengthened and confluent with one on abdominal margin; terminal dots as on forewing; fringe almost unmarked.

Forewing beneath more suffused, especially proximally; cell-dot and markings beyond present.—*Hindwing* white, with coarse brown irroration; cell-dot, terminal dots, and an ill-defined postmedian line present.

Colombia: Bogota, 2,800–3,200 m. (Fassl). 2 ♂♂ in coll. Dognin.

More recalls some African species of the section (*dapharia* Swinh., *fulvilinea* Warr., etc.) than anything Neotropical.

23. *Scopula* *lathraea* sp. nov.

♂, 26 mm. Face black. Palpus black, with some light scales beneath. Vertex yellow. Antennal shaft proximally ochre-yellow; joints slightly pro-

jecting, with fascicles of rather long cilia (probably nearly 2, but slightly damaged). Thorax and abdomen above pale yellowish, beneath almost white. Hindtibia about twice as long as femur, strongly dilated, with hair-pencil; tarsus scarcely over one-third, second joint half as long as first.

Forewing straw yellow, with a very few scattered blackish scales; costal edge narrowly deeper, more ochreous yellow; a slightly sinuous brown postmedian line (on some of the veins, particularly R^2 and R^3 , slightly thickened or dentate outward) arising at hindmargin just beyond three-fifths, rather less oblique than termen to near M^2 , then curved, becoming more oblique to R^2 , fainter and slightly excurved between R^2 and SC^2 , obsolete at costa; no terminal line; fringe proximally rather deeper yellow than ground-colour, distally much deeper yellow, almost orange.—*Hindwing* with termen very bluntly bent at R^3 ; as forewing but with the postmedian line complete, very gently curved (much less bent than termen), very feebly sinuate inward between R^2 and R^3 .

Underside whitish yellow, unmarked; costal edge of forewing more ochreous; tips of fringes nearly as above.

Magunda Estate, Luchenza, Nyassa (F. Nisbet). Type in coll. Tring Museum.

Near *rectisecta* Prout (Nov. Zool. xxvii. 291) and other West African species of the genus; lighter yellow (less ochreous) than that species, with more bent hindwing, differently formed postmedian line and slightly shorter hindtarsus. From *laevipennis* Warr. (Nov. Zool. iv. 52) it is at once distinguishable by the much less dentate postmedian, as well as the absence of antemedian line and cell-mark.

24. *Scopula klaphecki* sp. nov.

♂ ♀, 23–24 mm. Very similar to *caricaria* Reutti, differing as follows:

Collar white. *Forewing* with costal margin on an average rather more strongly grey-dusted; cell-dot sharper and blacker; lines generally distinct, the postmedian perhaps more angled and placed less far from the termen; subterminal less far from termen; termen with well-developed black dots, especially in anterior half.—*Hindwing* with postmedian line more bent and farther from cell-dot; subterminal less far from termen; termen as on forewing.

N. China: Tsingtau, Shantung, August 1–3, 1908 (L. Klapheck), type ♂ and allotype ♀ in coll. Tring Museum; Western Hills, Pekin, August 10–14, 1911 (F. S. Hughes), 4 ♂♂ and 2 ♀♀ in coll. Brit. Museum.

Differs from *leuraria* Prout (*Seitz Macrolep.* iv. 69) in its smaller size and much longer hindtarsus.

25. *Scopula umbilicata peruviana* subsp. nov.

♀. Ground-colour darker than in *u. umbilicata* Guen., decidedly tinged with greyish fawn; lines less firm, the postmedian of the forewing showing a tendency to form thicker marks on the two distal curves, foreshadowing those developed in the Old-World allies *pulchellata* Fab., *misera* Walk., etc.; terminal line more broken into dots or well-separated dashes.

W. Peru: Barranco, near Lima, April 2 (type), April 12 (3 ♀♀), May 7, 1913 (1 ♀) in coll. Tring Museum, collected by H. O. Forbes; Callao, 1 ♂, 1 ♀ (J. J. Walker) in coll. Brit. Museum.

I do not know *u. umbilicata* from Peru, but as it occurs again in E. Bolivia it ought to be found in E. Peru.

26. *Scopula hieronyma* sp. nov.

♂♀, 24–26 mm. Closely related to *S. plantagenaria* Hulst (*Ent. Amer.* ii. 185), from Texas, possibly a local form. In general larger. Wings relatively longer, with a more yellowish or ochreous tinge; markings more sharply expressed, dark costal spots of forewing enlarged, postmedian dark shades at radials and at hindmargin well expressed, subterminal line broad, rather deeply inbent at radials, here tending to become thickened.

Arizona: Jerome, June 1892 (E. J. Osler), type ♂ and a ♀ in coll. Tring Museum; Palmerlee, a ♀ in coll. L. B. Prout; also a ♂ from "Arizona" (Osler), without more exact locality, in coll. Tring Museum.

Hulst united this with *plantagenaria*, but founded his description mainly on the Texan insect. To my eye the two forms are very distinct.

27. *Scopula stenoptera* sp. nov.

♂, 19 mm. Face and upperside of palpus black. Vertex white. Collar light brownish. Antennal ciliation about 1. Thorax and abdomen whitish grey, dorsally with some fine black irroration. Foreleg darkened on inner side and (? by accidental discoloration) on last three joints of tarsus. Hindtibia somewhat elongate, dilated, with ochreous-whitish hair-pencil; tarsus about one-third tibia.

Wings narrow for the genus, recalling in shape those of *Lobocleta borunta* Schaus, but with the coloration of *L. jamaicensis* Warr.; white, with moderately dense blackish irroration; a black cell-dot; lines brownish grey, slightly thickened and blackened at costa and hindmargin; antemedian at one-third, obscure in cell, marked with a minute black dash on M, incurved behind M, angled outward on SM²; median shade feeble except at costa, angled outward (and with a slight black distal dash) at R¹, then retracted, passing near the cell-dot, dentate outward on the veins, again retracted on M², posteriorly near and parallel with the antemedian; postmedian at five-sevenths, lunulate-dentate, chiefly marked by black points on the veins, acutely projecting outward at R¹, incurved between the radials, inbent at fold; distal area with some dark shades, leaving free a lunulate subterminal, which forms larger inward-projecting spots at fold and (especially) between the radials, as in the *marginepunctata* group; termen with strong, somewhat lunulate black dots; fringe brownish, with some irroration, especially in the form of dots or dashes opposite the veins.—*Hindwing* with termen subcrenulate, with a slight excision (shallower than in *perfumosa* Warr., Nov. Zool. xi. 512) between the radials; antemedian line and the costal spots wanting; median shade rather thin, feeble, incurved proximally to the cell-dot, dentate outward at R²-M¹, incurved posteriorly; the rest nearly as in forewing, the fringe whiter.

Forewing beneath infuscated, except at abdominal margin, rather glossy, the markings obliterated excepting the cell-dot. Hindwing whitish, the cell-dot minute, the markings beyond very faintly suggested, the terminal dots strong.

Ucayali, Peruvian Amazonas (ex Staudinger, May 1905), type in coll. Dognin; Callanga, Cuzco, Peru, 1,500m., 1898 (O. Garlepp), a slightly whiter aberration, in coll. Tring Museum.

28. *Euacidalia oriochares* sp. nov.

♂, 26–28 mm. Closely similar to *E. rosea* Warr., Nov. Zool. iv. 444, from Dutch and French Guiana. Larger, the costal margins, especially of the hindwing, relatively more elongate. Less rosy, more irrorated with grey.

Forewing with SC² stalked (in *rosea* from the cell); the lines stronger, black-grey, the median rather thick and diffuse, closer to the cell-dot, which is distinct, black, and slightly elongate.—*Hindwing* more suffused, the median line less conspicuous, more narrowly and inconspicuously pale-edged distally.

Peru: La Merced, Chanchamayo, 1,000 m., type and another in coll. Tring Museum. Also a ♂ from Colombia (Fassl) in coll. Dognin and a ♀ from Caldera, Panama, in coll. Brit. Museum, the latter misidentified by Druce (*Biol. Centr.-Amer. Lep. Het.* ii. 146) as *oroandes* Druce, which is rather less elongate but has still longer cell of forewing, stronger cell-dot, lines more proximally placed, postmedian differently shaped, etc. As this Panama example is slightly intermediate in tone towards *rosea*, it is just possible that *oriochares* should be regarded as a western race of that species, in spite of the different venation.

29. *Lobocleta griseolimbata* (Warr. MS.) sp. nov.

♂ ♀, 16–17 mm. Closely related to *ossularia* Hb.-Gey. and *cocaria* Schaus, both wings somewhat narrower.

Forewing with the lines more feebly expressed, the median (as in the allies) somewhat variable in position—in the type touching the cell-dot, in the allotype rather more distal; distal area for a breadth of nearly 1 mm. darkened with blackish irroration.—*Hindwing* with termen slightly sinuous, minutely toothed at R³, the tooth itself, together with a spot proximally thereto free from dark irroration, hence inconspicuous on the under-surface, but rendered conspicuous on the upper by an enlargement of the black dot at base of fringe; markings similar to those of forewing.

Forewing beneath strongly infuscated, excepting posteriorly and in a narrow pale band distally to the postmedian row of dots. Hindwing beneath whitish, with scattered coarse irroration, especially at base; the cell-dot well expressed, the median and postmedian moderately, the dark terminal shade strong.

Costa Rica: La Uruca, near San José, 1,100 m., type ♂ in coll. Dognin; San Carlos, June 1899 (Underwood), allotype in coll. Tring Museum.

Neither specimen is in perfect condition, but the distinctive dark borders and characteristic underside will render it easy of recognition.

30. *Ptychopoda ludovicaria* (Culot).

Acidalia ludovicaria Culot, *Noct. et Géom. Eur.* (2) i. (livr. 48–50) 74, t. 11, f. 215 [1918], ♀ (Geryville).

The species which, on account of the coloration and markings (especially the unusually proximal position of the median line of the forewing and the postmedian of hindwing), I take to be the true *ludovicaria* of Culot, is represented in the Tring Museum by 6 ♂♂ and 3 ♀♀ from Bou Saada, April–May, one ♀ as dark and almost as heavily marked as Culot's type, the rest of a lighter clay-colour, 2 ♂♂ from Guelt-es-Stel, May 20 and 29, both rather densely irrorated, and a pair from Tala Kana, Gr. Kabylie, September 30, both small, with whiter ground-colour but with strong dark irroration and strong (in the ♀ thick) dark rufescent lines (confusingly similar to some aberrations of the following species).

As Culot neither describes nor figures the venation, and both he and Staudinger compared the type specimen with species of *Glossotrophia* and *Scopula*, the determination is perhaps somewhat precarious, the more so as Culot's beautiful figure scarcely does full justice to the sinuosities in the termen of the hindwing nor to the proximal curve of the postmedian of the forewing between M^2 and SM^2 , but all else agrees so excellently that, pending more precise information, I think it should be accepted. The ♂ hindtibia has two strong spurs, the tarsus is longer than the tibia, SC^2 of hindwing always long-stalked, though variably. The species may be placed in the vicinity of *asellaria* H.-Sch.

31. *Ptychopoda unicalcarata* sp. nov.

♂ ♀, 18–20 mm. Smaller than the preceding. Tongue apparently longer. Hindtibia of ♂ with a single long terminal spur. Ground-colour more rufous, markings generally weaker. Frenulum of ♂ black or blackish (in *ludovicaria* light ochreous brown).

Forewing with the median line crossing, or outbent just distally to, the cell-dot, posteriorly in general rather strongly incurved, sometimes almost obsolete; subterminal line ill-defined or almost obsolete.—*Hindwing* with corresponding distinctions.

Algeria: Bou Saada, May 18–27, 1911, May 12–14, 1912 (V. Faroult); 2 ♂♂ and 6 ♀♀ in coll. Tring Museum.

Worn specimens from Seksawa and Lalla Aziza, Morocco, from Aïn Sefra, S. Oran, and from Oued Nça, Nzab Country, seem, on account of the structure and general tone, to be referable to the same species, though two of the females from Aïn Sefra are large and heavily marked.

32. *Ptychopoda jonesi* sp. nov.

♂, 15–16 mm. Similar to *quadrirubrata* Warr. (Nov. Zool. iv. 437), slightly shorter winged. Face red, not black (in one example, however, somewhat mixed with black). Vertex red, not yellow. Ground-colour deeper gold-yellow, all the lines much thicker, brighter red. Hindwing beneath less whitish, more strongly marked.

Castro, Parana (E. D. Jones), November 1897 (type ♂) and November 1901, in coll. Tring Museum; 1 ♂, undated, in coll. E. D. Jones. Also a ♂ in coll. Dognin merely labelled "Santa Cruz."

Mr. Warren misidentified this as *quadrirubrata*, Mr. Jones as "*flexilinea* Warr."—a laps. cal. for *flexivitta* Warr. (*Proc. U.S. Nat. Mus.* xxx. 456); the latter, however, is a close ally, if not synonym, of *deportata* Walk. (*List Lep. Ins. Brit. Mus.* xxii. 673), differing structurally from *Ptychopoda* in the double areole and the three-spurred ♀ hindtibia.

33. *Ptychopoda charitotes* sp. nov.

♂ ♀, 20–22 mm. Face deep red-brown to blackish. Antennal joints of ♂ scarcely projecting, ciliation fine, about 1. Hindtibia of ♂ not very long, slightly thickened, tarsus fully 1.

General aspect of *persimilis* Warr., Nov. Zool. iii. 109.

Forewing with apex rather less produced; more glossy, with the dark irroration slighter, but generally with more reddish suffusions; antemedian lines faint

or almost obsolete, reddish; postmedian line straightish and sharply defined, parallel with termen, nearly as in *persimilis*, but whereas in that species it shows a very slight angle outward near costa and scarcely any curve inward at fold, in *charitotes* it is quite straight anteriorly and more appreciably incurved about fold; distal shades more red-brown or purple-brown, of almost equal intensity throughout posterior half of wing, marked close to the termen with the interrupted waved pale subterminal, which becomes thicker and more distinct close to tornus; additional narrower proximal subterminal shading between the radials; terminal line obsolescent; dots on fringe generally minute.—*Hindwing* with the lines more reddish than in *persimilis*; the postmedian markedly farther from termen, especially in the middle, where it does not make the strong outward curve of that species; terminal dots as on forewing.

Underside with corresponding distinctions in the postmedian line.

Assam: Khasia Hills, Mareh, April, May, and October, 3 ♂♂ and 2 ♀♀ in coll. Tring Museum (including the type), 1 ♂ in coll. L. B. Prout.

34. *Ptychopoda dura* sp. nov.

♂, 24–28 mm. Tongue developed. Antenna with minute processes, bearing fascicles of long, very slender cilia. Hindtibia dilated, fringed above with rather short, vertical hair-scales; a very long pencil from femoro-tibial joint, reaching nearly to the end of the rather long, slightly thickened and curved tarsus. Abdomen elongate. Head and body concolorous with wings, the face mostly overlaid with black, the abdomen with some faint dark spots anteriorly. Wings strongly elongate, rather thinly scaled, of the form and texture of *latiferaria* Walk. (*List Lep. Ins.* xxiii. 787) or of *Euacidalia oroandes* Druce, *rosea* Warr., etc.

Forewing with cell very long, areole ample, SC¹ from well before its apex, SC² and stalk of SC²⁺⁴ from its apex, M² arising late, almost perpendicularly, then very strongly curved; whitish brown, with a fleshy tinge, especially at base, along costa, and distally; cell-dot obsolescent; strong blackish costal spots before one-third and beyond two-thirds, marking the beginning of the lines, and a fainter costal shade between marking the beginning of the extremely faint median shade, which is somewhat tinged with fleshy grey and approaches the postmedian; antemedian spot oblique outward, a little produced on C–SC, the line otherwise only indicated by vein-dots, very slightly oblique inward; postmedian spot slightly oblique inward, the succeeding line formed apparently as in the *rosea* group of *Euacidalia*, but scarcely traceable to the acute angle on SC², then slightly incurved at R² and very slightly incurved between M¹ and SM², indicated chiefly by dashes on the veins; position of subterminal shown anteriorly by a pale space between fleshy-grey shades, these shades strengthening and meeting posteriorly so as to obliterate it; termen with feeble dark dashes; fringe slightly spotted.—*Hindwing* with termen slightly sinuous; C not quite anastomosing, rather gradually diverging, SC² moderately stalked; rather paler than forewing, except at distal and abdominal margins; lines marked at abdominal margin, postmedian continuing as vein-dots half across wing; subterminal complete, though vague, between fleshy-grey shades; terminal line and fringe as on forewing.

Underside rather more suffused. Forewing with base of costa darkened, costal spots present, a sinuous, interrupted postmedian line, a grey proximal-subterminal band; spots on fringe stronger. Hindwing with costal spots, cell-

dot and the markings beyond, postmedian series of vein-dots complete, somewhat sinuous; terminal line complete; dots on fringe rather strong.

Brazil: São Paulo; type in coll. Dognin. Paraguay: Sapucay (W. Foster), a large ♂ in coll. Tring Museum.

Very like a pale *Euacidalia oroandes* Druce, except in venation.

35. *Ptychopoda amnesta* sp. nov.

♀, 14–16 mm. Face black. Palpus slender, black, beneath whitish. Vertex impure white. Collar brown. Thorax and abdomen concolorous with wings. Forecoxa with dark irroration, femur and tibia less strongly so.

Forewing not broad, termen smooth, strongly oblique, very gently curved; areole long, SC¹ from well before its apex, SC⁵ from or close to its apex; whitish, with very fine brown irroration and a few scattered black scales; the irroration forms in particular an ill-defined basal shade, a rather broad and ill-defined median fascia (anteriorly strongly excurved round cell-dot, in some specimens diffused over it, posteriorly rather strongly incurved and deeply dentate) and shades proximally and distally to the subterminal; cell-dot black, minute; lines brown, lunulate-dentate, with black dots on the veins; antemedian indistinct, nearly parallel with median shade, more oblique inward at hindmargin; postmedian fine, oblique outward from two-thirds costa, acutely angulated at R¹, rather deeply incurved between the radials, then incurved again (chiefly between M² and SM²), slightly angled outward at SM²; subterminal line free of irroration, moderate anteriorly, forming an outward curve between SC⁵ and R², between R² and R³ forming a large inward-projecting spot which almost reaches the postmedian, at fold a similar but smaller and more angular spot, between R² and M¹ slender and very near termen; termen with large whitish spots at veins; fringe white, chequered (except at extremities) with brown between the veins and with dark brown basal spots at the vein-ends.—*Hindwing* with termen waved; basal area pale; the rest nearly as on forewing.

Forewing beneath with smoky suffusion throughout, except behind SM²; cell-dot present, sometimes also a faint row of postmedian vein-dots; a dark terminal line; fringe paler, distally white.—*Hindwing* beneath less sharply marked than above, but similar, the postmedian less incurved posteriorly; terminal line and fringe as on forewing beneath.

Cuba: Santiago, May and June 1902 (W. Schaus), 8 ♀♀ in coll. L. B. Prout, including the type; also 1 ♂ and 4 ♀♀ in coll. Brit. Museum, the ♂ in poor condition but admitting of the addition of the following structural characters:

♂ antenna with the joints projecting, the fascicles of cilia long (fully 2); hindtibia very short and slender (shorter than femur), tarsus rather long, slender.

36. *Ptychopoda macouma concinna* form. nov.

Haemalea concinna Dogn. ined. (in coll.).

♂, 21–24 mm. In general larger than name-typical *macouma* Schaus (*Tr. Amer. Ent. Soc.* xxvii. 258). Ground-colour less whitish—more strongly shaded with grey and in places with brown, more recalling the coloration of *elegantaria* H.-Sch. (*Samml. Aussereur. Schm.* i. f. 191); subterminal shade better developed, generally scarcely at all interrupted, particularly on the forewing, where it forms an irregular brown, distally dark-mixed band.

Bolivia : Charaplaya, 1,300 m., June 1901 (Simons), 11 ♂♂ in coll. Tring Museum, including the type, others in other collections ; Santiago del Estero (J. Steinbach). Peru : Pozuzo, Huanuco ; La Union, Rio Huacamayo.

Seems seldom to occur with name-typical *macouma*, which is the only form yet known from Colombia, Venezuela, and the Amazons, but which also occurs in Peru (Palcazu and La Union) and Bolivia (Chimate, Salampioni, and Chulumani). Possibly we have two extremely similar species mixed, but the Peruvian and Bolivian forms of the two are not very sharply differentiated.

37. *Ptychopoda invocata* sp. nov.

♂, 22-24 mm. Akin to *elegantaria* H.-Sch., the hindtibial tufts, as in that species, reaching about to the end of the greatly abbreviated tarsus. Abdomen with the dorsal whitish spots reduced in size, leaving the dark coloration prominent. Both wings browner than in *elegantaria*, on account of the development of coarse and rather copious dark irroration.

Forewing with the margins, as in *elegantaria*, somewhat shaded with violaceous, the dark costal margin broader, the blackish cell-mark stronger, rather elongate ; antemedian line more equally developed throughout, less sinuous ; postmedian forming an **acute angle inward** at fold, then markedly oblique outward to hindmargin ; median also more angulated inward at fold than in most *elegantaria*.—*Hindwing* with corresponding distinctions.

S.E. Peru : La Oroya, Rio Inambari, 3,100 ft., October 1904, wet season (type) ; Rio Huacamayo, Carabaya, 3,100 ft., June 1904, dry season ; both in coll. Tring Museum, collected by G. Oekenden.

The only densely irrorated species in the group.

38. *Ptychopoda pareupithex* sp. nov.

Pareupithex eupitheciata Warr., *Nov. Zool.* xiv. 222 (1907), indescr. (nec Guen.).

♂, 18-21 mm. Face and palpus buff, strongly mixed with rufous ; vertex whitish buff. Antennal ciliation even, slightly over 1. Collar ochraceous buff, or slightly rufous. Thorax and abdomen pale buff, the former scarcely, the latter very strongly, mixed with chestnut ; abdomen tufted beneath. Midtibia not tufted. Hindleg strongly tufted, the tuft having a rufous tinge distally. Wing-structure as given by Warren (loc. cit.).

Forewing pale cream-buff, with faintest tinge of olive ; some slight chestnut shading at base and along costa ; a dark cell-dot at one-half ; a somewhat sinuous, posteriorly widening, chestnut band just beyond, separated from a much paler (more vinaceous) subterminal band by a thread of the ground-colour ; the bed of hairs towards anal angle predominantly chestnut.—*Hindwing* with cell-dot ; chestnut band more proximal, rather broad, but in anterior half obsolescent ; subterminal band irregular, in anterior half shadowy, posteriorly developing a triangular chestnut patch which touches tornus.

Underside with markings similar, on forewing more indefinite, on hindwing with the cell-dot very conspicuous ; peneil of forewing somewhat ochreous, tuft of hindwing more chestnut, with one or two blackish spots.

S.E. Peru : La Oroya, Carabaya, 3,100 ft. (G. R. Oekenden), November-December 1905, wet season (type and others), June and September 1904 ; in coll. Tring Museum.

One of the males bears Warren's label, showing that he misidentified Guenée's Brazilian species. The non-stalking of SC^2 and R^1 of hindwing is no doubt—as in the group *Xenocentris*—a ♂ character and certainly does not show a derivation from *Scopula* = *Emmittis*.

39. *Ptychopoda* (*Lobura*) *cellifimbria* sp. nov.

♂, 14–15 mm. Closely similar to *subcrinita* Schaus, *Ann. Mag. Nat. Hist.* (8) xi, 353.

Forewing with the inner-marginal flap scarcely so long; areole small; beneath long-haired in cell; on an average less reddish or purplish than in *subcrinita*, the pale patch beyond DC less conspicuous and less anteriorly extended.—*Hindwing* perhaps rather less elongate than in that species; beneath less covered with hair, but with long costal fringe and abdominal-marginal tuft or pencil well developed, the latter paler than the floccous rufous masses found in *subcrinita*.

♀ paler and narrower winged, with the typical *Ptychopoda* structure; not unlike a small *praetextaria* Guen. ♀, but with the band-like markings of distal area much less developed.

Trinidad: Caparo, November 1905 (S. M. Klages), type and allotype ♀ in coll. Tring Museum; a damaged ♂ in coll. Deutsch. Ent. Museum.

SUBFAM. LARENTIINAE.

40. *Polynesia curtitibia* sp. nov.

♂ ♀, 21–24 mm. Similar to *sunandava* Walk. Face with the yellow transverse band more broadly separated from the white fillet (as in *truncapex* Swinh.). Palpus with third joint rather longer and slenderer. Hindcoxa of ♂ swollen at base much as in *truncapex*, the hindtibia shortish and much swollen (in *sunandava* slender, slightly longer than femur). Abdomen of ♂ dorsally darker than in *sunandava*.

Forewing with costal margin rather less convex (straighter in middle); ground-colour in ♂ rather lighter straw-yellow, with the markings darker drab (less rufescent), the silvery scales less numerous; both sexes with the irregular and interrupted lines of proximal area (as far as cell-dot) more strongly developed, the cell-dot itself small and concise, the double postmedian row of spots much thickened from costal margin to R^1 , confluent at the radials, the spot of the outer row on R^1 produced distally.—*Hindwing* with the markings at (or just beyond) two-thirds abdominal margin stronger than in *sunandava*.

Assam: Khasia Hills, April 1894 (type ♂ and a ♀), September 1893 (a ♂, Cherrapunji), June 1894 (a ♀), all in coll. Tring Museum.

41. *Eois carnana aberrans* (Warr., MS.) subsp. nov.

♂ ♀. Less variegated than *c. carnana* Druce (*Biol. Centr.-Amer., Lep. Het.* ii, 115, t. 52, f. 10, 11), from Central America, the yellow markings paler and more restricted, the shade beyond the postmedian on the forewing only expanding into a spot at the radials, not again posteriorly. Hindwing with the dark median line rather strong and nearly straight, the postmedian more strongly sinuous than in *c. carnana*.

Brazil: Rio Janeiro (Edwin Wilson), type ♂ in coll. Brit. Museum; Castro, Parana, a series in coll. E. D. Jones, a worn ♀ in coll. Tring Museum; "off Montevideo" [or rather, off S. Brazil], 28° 24' S. lat., 46° 30' W. long., November 26, 1911 (Dr. Charles Chilton), 4 ♂♂, 5 ♀♀ in coll. L. B. Prout (vide *Entom.* xlv. 204-5).

42. *Eois lucivittata expurgata* subsp. nov.

♂, 25-28 mm. On an average larger than *l. lucivittata* Warr. (Nov. Zool. xiv. 239), from Peru.

Forewing with the strong V-shaped subcostal projections on the proximal lines, which in *l. lucivittata* are generally highly developed, reduced to small insignificant teeth; the outer of the postcellular pair of lines wanting (4 specimens) or rudimentary (1); terminal dashes wanting.—*Hindwing* with the outer of the post-cellular lines wanting; terminal dashes wanting.

Colombia: Cañon de Tolima, 1,700 feet (A. H. Fassl), December 1909, 4 ♂♂, March 1910, 1 ♂, in coll. Tring Museum.

Both the forms of this "species" may have to sink as races to *carmentis* Druce, of which only the type, from Guatemala, is known to me; this is smaller, rounder winged, with the admarginal line and subapical mark wanting, etc.

43. *Eois primularis* sp. nov.

♂♀, 26-28 mm. Similar to *lucivittata* Warr.

Forewing slightly less broad, with rather more oblique distal margin; ground-colour lighter, more primrose-yellow; outer postcellular line irregularly developed, forming a **longitudinally produced dark spot** between R³ and M¹ (touching the inner postcellular line) and a smaller dark spot between M¹ and M²; fifth line (last but one) angulated inward subcostally and more markedly inbent between the radials than in *lucivittata*; terminal dashes reduced to dots or obsolete.—*Hindwing* with similar spots on the outer postcellular line, though generally reduced; the succeeding line corresponding to that of forewing; terminal dots generally strong, but less elongate than in *lucivittata*.

Forewing beneath with the reddish markings much darker and duller, more restricted (especially in distal area) to the costal part of the wing; a distinct cell-spot developed.

Peru: Huancabamba, Cerro de Pasco (E. Boettger), 4 ♂♂, including the type; Oconeque, Carabaya, 7,000 ft., July 1904, dry season (G. R. Ockenden), 1 ♂, 1 ♀; Agualani, 9,000 ft., December 1905, wet season (G. R. Ockenden), 1 ♀; all in coll. Tring Museum.

44. *Eois camptographata* sp. nov.

♂♀, 20-26 mm. Similar in general aspect and coloration to *isographata* Walk. (*List Lep. Ins.* xxvi. 1756), on which account—notwithstanding several important differences—it has hitherto remained undetected. ♀ antenna bipectinate with long branches (bringing it into the group *Pseudasthena*).

Forewing with the curved antemedian line from hindmargin **throwing out a broad tooth on SM²**, the extremely oblique streak from base of hindmargin to M (overlooked or obsolete in Walker's type) replaced by a longer, less oblique one, which continues along the cell-fold and meets the antemedian line on DC, the two

thicker, darker (more purple-mixed) than the corresponding lines of *isographata*, the area enclosed between them slightly vinaceous-cinnamon, the anterior end of the antemedian subobsolete; postmedian pair of lines nearer the termen than in *isographata*, forming a very much stronger rounded projection at R^{2+3} , anteriorly somewhat divergent instead of coalescing, extremely oblique inward to midcosta, the proximal one thickened anteriorly; no streak across median area between R and R^2 , but instead a subcostal streak from apex, generally at least reaching the postmedian lines; subterminal line rather nearer to termen, especially anteriorly. — *Hindwing* with postmedian lines generally more divergent at abdominal margin than in *isographata*.

Forewing beneath more strongly marked than in *isographata*, with a complete or nearly complete costal streak.

E. Peru: Huancabamba, Cerro de Pasco (Hoffmanns), the type and four others. Also from S.E. Peru (La Oroya, etc.) and Bolivia (Charaplaya). All in coll. Tring Museum. The Huancabamba specimens are on an average the largest.

45. *Eois verisimilis* sp. nov.

♂, 21 mm. Indistinguishable from *dissimilis* Moore (*Lep. Ceyl.* iii. 450) except in two structural characters. The ♂ antenna, which in *dissimilis* is nearly simple, with minute ciliation, bears short pectinations (scarcely longer than diameter of shaft) surmounted by fascicles of cilia.

Forewing with the areole (which is present in all the *dissimilis* I have examined, though nearly always small, sometimes minute) entirely wanting. In both species, though perhaps more markedly in *verisimilis*, R^2 arises well before the middle of DC.

Sambawa: Tambora (W. Doherty), 6 ♂♂ in coll. Tring Museum, the type and three others taken in June 1896 at 2,500–4,000 feet, one in low country April–May 1896, and one, without indication of altitude, in June 1896.

46. *Eois memorata* (Walk.).

Pomasia memorata Walk., *List Lep. Ins.* xxii. 657 (1861) (Moulmein).

Anisodes rapistriaria Swinh., *Tr. Ent. Soc. Lond.* 1890, p. 210, t. 7, f. 9 (Rangoon).

Pseudasthena memorata, Moore, *Lep. Ceyl.* iii. 450 (1887).

Psilocamboia memorata Hmps., *Ill. Lep. Hel.* ix. 151 (1893).

I find that three Indian species are mixed under this name. Briefly they may be distinguished as follows:

- Antennal ciliation of ♂ about as long as diameter of shaft 1
- Antennal ciliation of ♂ extremely short:
 - Areole developed, face red-brown on upper half, yellow on lower, wing-expanse 19–22 mm. 2
 - Areole wanting, face uniformly ochreous red-brown, wing-expanse 16–20 mm. 3

To facilitate the study, I first redescribe No. 1, which is the true *memorata* Walk. = *rapistriaria* Swinh. (*ephyrata* Walk., wrongly sunk by Swinhoe, *Cat. Lep. Oxf. Mus.* ii. 351, is a close ally of *pallidula* Warr., *Nov. Zool.* iii. 383).

♂ ♀. 21–26 mm. On an average larger than the two following, more reddish than *anhydroscia*, scarcely at all variable in tone. The ♂ distinguishable at once by the longer antennal ciliation. Face red-brown on upper half, yellow on lower,

even more sharply bicoloured than in *amydroscia*. Abdomen dorsally red-brown, with clear yellow, sharply defined spots.

Forewing with areole nearly always present, though often minute (in three out of some three dozen examined, entirely wanting); the network of reddish lines rather sharply and evenly developed, the group immediately beyond the cell-dot usually accompanied by some greyish shading; radial and subternal dots of proximal subterminal line usually rather small and thin but sharp, looking a little darker than those of *amydroscia*.—*Hindwing* with the line immediately beyond the cell-dot almost always sharply expressed, oftenest touching or even absorbing the dot; very generally some grey shading developed between this and the succeeding line.

Burmah (type), also from Ceylon, Travancore, Kulu, Sikkim (common), Bhotan, Assam (common), S. Java, Bali.

47. *Eois amydroscia* sp. nov.

♂ ♀, 19–22 mm. (= No. 2 above). Face red-brown on upper half, yellow on lower. Areole developed. General tone yellower (less rufous) than the preceding and following species, though rufescent aberrations do occur and may become normal in the S.E. of its range, as the only Sunda Island examples before me (Pulo Laut, 3; W. Java, 1) are of this tone. The group of lines beyond the cell-dot not so often connected by grey shading as in the allies, the dark radial and subternal spots of the proximal subterminal line generally diffused, occasionally obsolete, scarcely ever sharp. Dorsal pattern of abdomen (consisting of large yellow spots on the more rufescent ground) rather feebly developed, often almost obsolete.

Hainan (type in coll. Tring Museum), Sikkim to Malay Peninsula, Pulo Laut, W. Java, in coll. Tring Museum.

48. *Eois phaneroscia* sp. nov.

♂ ♀, 16–20 mm. (= No. 3 above). Face uniform red-brown. ♂ antennal ciliation very short. Abdomen about as in *amydroscia*.

Forewing with areole wanting; ground-colour generally as in *memorata* or slightly more reddish, but variable, sometimes with a decided tinge of vinaceous pink, sometimes as ochreous as in normal *amydroscia*; reddish lines in general less sharply expressed than in the allies; those immediately beyond the cell-dot generally obscured or subobsolete, being replaced by a single dark-grey line (rather less strongly oblique inward anteriorly than the corresponding line of *memorata* and *amydroscia*) or more commonly by a shadowy grey band.—*Hindwing* with similar distinctions.

Sikkim, Assam, Malay Peninsula, Java, Bali, Pulo Laut. Type ♂ from the Khasia Hills, February 1894, in coll. Tring Museum.

May conceivably be a subspecies of *sanguilineata* Warr., Nov. Zool. viii. 195.

49. *Eois planifimbria* (Warr. MS.) sp. nov.

♂ ♀, 16–20 mm. Face yellow, almost entirely overspread with red suffusions. Palpus reddish on outer side. Vertex narrowly white between antennae, then narrowly red or red-spotted; occiput predominantly yellow. Antenna of ♂

somewhat thickened proximally, somewhat lamellate, the ciliation extremely short (about as in the two preceding species). Thorax and abdomen yellow, paler beneath; the thorax anteriorly mottled with red. Foreleg reddened on inner side.

Forewing with small areole; buff-yellow, the markings rosy; a more purplish costal streak or shade almost to apex, leaving the extreme costal edge yellow with some dark spots; some slight irroration at base; antemedian line weak or almost obsolete, waved and very slightly curved; traces of an interrupted line commonly appearing midway between this and cell-dot; cell-dot small, mixed with black; postmedian line double, both elements fine, parallel, sometimes more or less fused together, placed rather near the cell-dot, angulated outward at SC^2 , inbent at fold; one or two lines (more or less interrupted, oftenest only developed subcostally and between R^3 and M^1) in the succeeding area; proximal subterminal line diffuse, wavy, sometimes broken into spots, inbent at fold; distal subterminal generally finer and more feeble, usually connected with proximal by some shading between R^2 and R^3 and between M^1 and M^2 ; no terminal line; fringe yellow.—*Hindwing* with termen somewhat waved, not noticeably bent at R^3 ; R^3 and M^1 separate; proximal area with one or two fine rosy lines; cell-dot minute; markings beyond corresponding to those of forewing.

Forewing beneath predominantly rosy; becoming cream-colour at hindmargin and with an admixture of cream-colour between cell and postmedian and between postmedian and subterminal; extreme costal edge partly yellow; extreme distal margin and fringe pale yellow. Hindwing beneath cream-colour, with markings rosy; a slight antemedian; a broad, sinuate postmedian (touching the cell-dot); a double, broad subterminal, partly confluent.

Solomon Islands: S. side of Choiseul, January 1904 (A. S. Meek), 4 ♂♂, 3 ♀♀, including the type ♂; Tulagi Island (Woodford), 1 ♀; Florida Island, January 1901 (A. S. Meek), 7 ♂♂, 8 ♀♀; Guadalcanar, April and May 1901 (A. S. Meek), 4 ♂♂; all in coll. Tring Museum.

Warren labelled the Tulagi specimen (which is in poor condition) "*planifimbria*," but apparently afterwards decided to sink the species to *dissimilis* Moore (!).

50. *Acolutha flavipictaria* sp. nov.

♂, 20–22 mm. Closely like *pictaria* Moore (*Lep. Coll. Atk.* p. 267) except in coloration. Both wings slightly broader.

Forewing with distal margin slightly less oblique; costal area less variegated, the grey being mottled almost throughout with shades of ochreous, the beginnings of the lines only a little brighter ochreous, hence not conspicuous; posterior half of wing brighter yellow than in *pictaria*, not or scarcely at all mixed with white, the continuation of the lines at hindmargin bright ochreous brownish, termen also shaded with ochreous brownish, thus very different from that of *pictaria*, in which it is white between two interrupted fuscous lines.—*Hindwing* predominantly yellow (in *pictaria* predominantly white); the markings similar to those of *pictaria*.

Forewing beneath as in *pictaria*; hindwing with an indistinct dark subterminal line, or at the least with a dark subapical shade; in strongly marked specimens the beginning of a second, rather more proximally placed line appears at abdominal margin (in *pictaria* the hindwing beneath is pure white throughout).

Khasia Hills, December 1893, February and March 1894, 10 ♂♂ in coll. Tring Museum.

I do not think this can be a form of *pictaria*, but even if it be it well deserves naming; there is an absolutely sharp demarcation in the two Khasia series.

51. *Acolutha subrotunda* sp. nov.

♂♀, 23–24 mm.

Forewing with apex more rounded than in any other *Acolutha* except *flavipictaria*; coloration similar to that of *flavipictaria* but paler, more mixed with white in middle; cell-dot minute; the double postmedian line rather more regular, less thickened at radials and posteriorly, less interrupted between; subterminal lines feeble, coloured nearly as in *flavipictaria*, but separated by a white line as in *pictaria*.—*Hindwing* rounder than in any other species of the genus, the distal margin being more feebly and regularly subcrenulate, the strong excision between R^1 and R^2 being replaced by a pair of very feeble excisions, leaving a tooth at R^2 almost as strong as that at R^1 ; only at R^3 a rather stronger tooth; predominantly pale yellow, the brownish markings weak; white bands in proximal part.

Underside similar to that of weakly marked *pictaria* but with the dark costal shade less posteriorly produced near termen.

Lesser Sunda Islands: Sambawa, September 1891 (W. Doherty), type ♂ and a ♀ in coll. Tring Museum, ex coll. H. J. Elwes; S. Flores, October 1896, dry season (Everett), a smaller, perhaps paler (but rather worn) ♂ in the same collection.

52. *Xanthorhoë politula* sp. nov.

♀, 36 mm. Face without developed cone of scales. Palpus moderately long, heavily scaled. Antenna subserrate. Head and body brown.

Forewing rather broad, termen crenulate, very gently curved, rather strongly oblique; brown, somewhat as in *Camptogramma stellata* Guen. but more glossy, and with more purplish or vinous hue, more recalling the *monastica* group (from New Guinea) or even approaching the Indian *Paracomucha chalybearia* Moore; basal patch traversed by ill-defined lines, its boundary rather straight, at about one-fourth; median band rather broad, at costa occupying the middle third, at hindmargin more than one-third (nearer to tornus than to base), with the limiting lines and some costal spots the darkest, but containing also a second antemedian line and two highly crenulate postmedian ones, the proximal of them angulated inwards subcostally; the true antemedian fairly direct, but more sinuous than subbasal; the postmedian much broadened in anterior half, indented at the veins, the indentations filled in with white dots, the normal projection at the radials and inward bends at R^2 and to M^2 present but weak; pale band beyond postmedian not very conspicuous, its distal boundary-line only strong anteriorly; a subterminal costal patch, a weaker one about the radials and an oblique shade from M^2 to near tornus proximally to the subterminal; the rest of the distal shades slight; terminal line blackish, interrupted by small pale dots at the veins and slightly weakened at middle of interspaces; fringe weakly mottled.—*Hindwing* with termen crenulate; greyer than forewing, almost unmarked except at abdominal margin and especially in tornal region; terminal line and fringe as on forewing.

Both wings beneath, but especially the forewing, rather weakly marked;

cell-dots present, that of the hindwing the larger; some pale wavy lines, more or less broken into whitish dots, only the postmedian distinct on the forewing; terminal line and fringe nearly as above.

Panama: Volcano de Chiriqui, 5,000–9,000 ft. (Watson), type in coll. Tring Museum.

The British Museum collection possesses a ♂ from Boguete, Chirigui; antenna rather long, with rather long peetinations, the last eleven joints merely serrate and ciliate. Possibly a form of *veraria* Warr. (*Proc. U.S. Museum*, xxxiv. 102) from Mexico, only known to me from the description and an unpublished drawing of Warren's; but the latter has a differently shaped median band and the figure shows the forewing more elongate.

53. *Xanthorhoë exorista* sp. nov.

Xanthorhoë saturata Janse, *Check-List S. Afr. Lep. Hel.* p. 100 (1917) (nec Guen.).

♂♀. Very similar to the well-known *saturata* Guen. (*Spec. Gén. Lép.* x. 269) of India, the sexual dimorphism parallel. More variegated both above and beneath, the band of forewing above very variable in colour, redder or blacker, but not of the dirty grey-brown of *saturata*, the postmedian line at costa (at least on underside) less incurved, its median projections generally stronger, subbasal band better defined; both wings (especially beneath) with dark subterminal shading better developed, beneath commonly forming almost continuous bands; underside less mixed with whitish.

South and Central Africa: Natal (the type ♂ from Durban, in coll. Tring Museum, bred by G. F. Leigh, October 1902) and general from the Cape to Tanganyika, also from Nyassaland and Uganda.

This common species has never until recently been studied critically. In the British Museum the ♂♂ have been placed with *saturata* and the ♀♀ misidentified with *Epirrhoë submaculata* Warr. (*Nov. Zool.* ix. 515); while at Tring Mr. Warren curiously mistook it for the very different *spatiosata* Walk. Increasing familiarity with its distinctive facies led me gradually to doubt its identity with its Indian ally, and at last I submitted the ♂ genitalia to my kind friends Rev. C. R. N. Burrows and F. N. Pierce, who find my suspicions confirmed. The apex of the valve is not bifurcate, whereas it is markedly so in *saturata*; saccus less narrowed than in that species; cornuti less numerous (in *saturata* forming two patches); calcar perhaps less delicate.

54. *Ortholitha propinguata superlata* subsp. nov.

♂, 43–44 mm.; ♀, 46 mm. Larger and relatively broader-winged than *p. propinguata* Koll. Both wings with a decided tinge of brown, the medium band of the forewing less darkened than in the other races, giving altogether a more uniform appearance to the insect.

N. Luzan, 5,000–6,000 ft. (Whitehead), 3 ♂♂, 1 ♀, in coll. Tring Museum.

Cidaria propinguata Koll., *Hügel's Kaschmir*, iv. 488 (1848), not identified by Hampson and others, is the oldest name for the collective species which has passed as *niphonica* Butl. (1878). Besides the one here described, there seem to be at least three separable races: *p. propinguata* Koll. (N.W. India to Sikkim), *p. niphonica* Butl. (Japan), and *p. suavata* Christ. (E. Siberia); *ignotata* Stgr.

(Tibet), conjecturally referred here by me in Seitz (*Macrolep.* iv. 165), is now known to me from two examples in the Tring Museum and proves to be a race of *latifusata* Walk.

55. *Lampropteryx neelys* sp. nov.

♂ ♀, 28–32 mm. Closely similar to *minna* Butl. (*Tr. Ent. Soc. Lond.* 1881, p. 424), from Japan and E. Siberia. Antenna of ♂ without the rudimentary pectinations of that species, scarcely even so dentate as in *suffumata* Schiff.; the fascicles of cilia scarcely as long as diameter of shaft. Face blacker, the pale irroration being quite sparse.

Forewing at least as strongly glossy as in *minna*, the markings almost identical, but darker (coloured as in dark *argentilineata* Moore); white lines even slenderer; antemedian rather more direct (not at all oblique inward anteriorly); postmedian in general more distally placed, median band always broad.—*Hindwing* rather darker than in *minna*, with markings still more obsolete.

Underside likewise a little darker than in *minna*, the pale parts warmer in tone; postmedian of hindwing more vertical at costa (not or scarcely oblique inward).

N. India, apparently not uncommon, especially in the Khasia Hills; type from that locality in coll. Tring Museum, paratypes in coll. Brit. Museum, coll. Joicey, coll. Prout.

Has hitherto been confused with *minna*.

56. *Lampropteryx synthetica* sp. nov.

♂ ♀, 32–34 mm. Antenna of ♂ with pectinations almost as well developed as in *minna*. Termen of forewing more oblique, nearly as in *siderifera* Moore (*Lep. Coll. Atk.* p. 276), to which it is also akin in the strong development of lateral pencils on the last segments of the abdomen (section *Paralophia*). Head and body nearly as light as in *minna*, the abdomen with dark dorsal spots as in that species.

Forewing a trifle less glossy than in *minna*; the dark markings slightly less brown; cell-mark enlarged; antemedian slightly more distally placed, its tooth on fold rather longer; median band narrower posteriorly.—*Hindwing* with DC strongly biangulate; abdominal fringe in ♂ strong, in part tinged with ochreous; ground-colour nearly as dark as in *neelys* Prout, cell-dot stronger.

Underside much as in *neelys*, but more uniform purple-grey (less brown-mixed).

Formosa: Arizan, August 1908, 1 ♂ and 1 ♀, July 1908, 1 ♀; in coll. Tring Museum.

57. *Lampropteryx producta* sp. nov.

♂ ♀, 33–38 mm. Extremely like the preceding and agreeing in most points of structure. Antenna of ♂ dentate-fasciculate, slightly more strongly than in *suffumata* Schiff., but without the pectinations of *synthetica*. Wings still more elongate, shaped as in *siderifera* Moore.

Forewing with median band nearly as broad and dark as in *neelys*, the proximal indentations (at both folds) strong, the distal indentation on M² also deep; termen and fringe rather strongly marked.—*Hindwing* as in *synthetica* or rather more strongly marked.

Underside more variegated with whitish than in *synthetica*, intermediate towards that of *minna*. Hindwing with postmedian rather more zigzag than in the allies, dark spots or wedges proximal to the white subterminal dots generally well developed.

W. China: Pu-tsu-fang, 9,820 ft., June and July 1890 (native collector), type and others; Pu-tsu-fu; Che-tou. Described from a series in coll. Tring Museum, but I have also seen many in the Leech collection, where it was misidentified as *suffumata* Schiff.

58. *Perizoma illimitata* sp. nov.

♂, 24–26 mm. Near *cinereolimitata* Th.-Mieg (*Le Nat.* 1892, p. 235). Rather smaller.

Forewing slightly narrower, with margins slightly more curved; cell rather longer (nearly one-half); duller fuscous, less glossy; subterminal line less pure white, less closely approaching termen, its course, though similar, distinguishable by being sharply angulated inward on R^3 and more slightly on M^1 and M^2 , bilunulate outward between; terminal area not appreciably paler than ground-colour; fringe more strongly chequered than in *cinereolimitata*.—*Hindwing* narrower than in that species, with costal margin relatively longer.

S.E. Peru: Agualani, Carabaya, 9,000 ft. (G. R. Ockenden), August 1905 (type) and August 1904, both in coll. Tring Museum.

59. *Perizoma vacillans tolimensis* subsp. nov.

♂. Both wings with the ground-colour whiter than in *v. vacillans* Warr. (*Nov. Zool.* xii. 327, Bolivia).

Forewing almost without dark shading in the outer area proximally to the subterminal in cellules 2 and 3.—*Hindwing* above and beneath more feebly marked than in *v. vacillans*, but with the cell-dot at least as large and prominent.

Colombia: Paramo del Tolima, 4,200 m., January 1910 (A. H. Fassl), 6 ♂♂ in coll. Tring Museum.

60. *Perizoma cyrtozona* sp. nov.

♂, 32–34 mm. Face slightly rough-scaled. Palpus almost 2, moderately rough-scaled. Antenna almost simple. Metathoracic crest slight. Abdomen rather slender, smooth. Head and body concolorous with wings, the face and palpus darkened.

Forewing moderately broad, costal margin gently curved (straightish in middle), termen moderately oblique, little curved; DC curved, strongly oblique posteriorly, R^1 connate or just separate, M^1 widely separate; rather glossy whitish, from costal margin to SC and on most of the veins more buff; markings brown; basal patch moderately strong, distally darker, 2 or 5 mm. wide, limited by a nearly straight but slightly dentate white line with a stronger tooth behind SM^2 ; succeeding area traversed by close but indefinite lines of irroration; median band 5 or 6 mm. wide at costa, 1 mm. at hindmargin, limited by white lines and enclosing a large oblique pale patch from costa to near R^2 ; cell-dot fairly large, at proximal edge of this patch; antemedian line from costa at nearly one-third,

acutely angulated outward behind cell-fold (reaching the plane of the cell-dot), posteriorly convex baseward; postmedian forming a strong outward curve between costa and M^2 , then nearly vertical to hindmargin, somewhat lunulate-dentate throughout, the indentations (on the veins) all slight except on the medians; two succeeding lines, best defined anteriorly; distal area dark-clouded, especially in anterior half; subterminal deeply dentate, filled in proximally with three or four blackish triangles anteriorly and with feeble indications of smaller ones posteriorly; terminal line blackish, finely cut by the veins and more or less interrupted midway between; fringe somewhat mottled and with dark spots opposite the veins.—*Hindwing* with termen slightly waved, prominent at SC^2 ; pale brownish grey, slightly browner distally than proximally; cell-dot small; an ill-defined lunulate-dentate brown postmedian line; terminal line weak; dots on fringe rather strong.

Underside glossy brownish. Forewing as far as the postmedian darker, with some pale costal irroration or strigulation; cell-dot present; postmedian rather strong in anterior half; subterminal indicated in anterior half, with strong proximal clouding and traces of the dark triangles; termen and fringe nearly as above. Hindwing with cell-dot, a strong and thick postmedian line (rather more proximal than above) and ill-developed subterminal line, with some proximal shading (generally strongest towards abdominal margin).

Colombia: Monte Tolima, 3,800 m., February 1910 (A. H. Fassl), 4 ♂♂ in coll. Tring Museum.

Like the related species (*rostrinota* Dogn., *Hét. Nouv. Amér. Sud*, xxii. 11, *camptogrammaria* Warr., *Nov. Zool.* xiv. 229, etc.), as well as the two just described, this has probably no close relationship with the typical *Perizoma* of Europe.

61. *Lithostege scoliogramma* sp. nov.

♀, 27 mm. Face pretuberant, blackish fuscous. Palpus about 2, stout; blackish fuscous. Vertex mixed with whitish. Thorax above fuscous, beneath (with coxae) white-mixed. Abdomen pale brown, whiter beneath. Legs pale brownish, the foreleg somewhat darkened on inner side; foretibial claw rather long, the second (outer) one vestigial.

Forewing rather broad, costa strongly arched, termen gently curved, tornus moderate; violet-grey, with brownish fuscous irroration; a small brown patch just outside cell, a black mark at DC^4 ; lines fine, black; subbasal at 1.5 or less, scarcely bent; antemedian from beyond two-fifths costa to well beyond middle of hindmargin, strongly angled inward in cell and outward on M at base of M^2 , then slightly sinuous to hindmargin; slightly pale-edged proximally, especially at costa; faint traces of a broader line 1 or 2 mm. proximally to it, subparallel but with the outward angle less deep; postmedian at about two-thirds, slightly lunulate-dentate (the teeth pointing inward on the veins), very feebly incurved between the radials and in submedian area, finely pale-edged distally, especially at costa; a dark cell-dot and (crossing it) traces of a median shade in middle of central area, giving place in its narrow posterior part to some longitudinal lines connecting antemedian with postmedian, an oblique one in front of SM^2 particularly noticeable; traces of a subparallel line beyond the postmedian; a pale, irregularly lunulate-dentate subterminal line from costa near apex to tornus, slightly

incurved between the radials; terminal line blackish, interrupted at the veins; fringe rather duller, weakly marked.—*Hindwing* not extremely small, the veins not much curved; uniform glossy pale grey.

Underside glossy brown-grey, unmarked, except for a whitish postmedian costal spot on forewing.

Misiones, Argentina, July (per A. Heyne), type in coll. Deutsch. Ent. Museum.

Larger and broader winged than *tzaddi* Prout (*Tr. Ent. Soc. Lond.* 1910, p. 236), much more uniform, the lines different, the palpus longer. Almost a *Chesias* by the shape of the forewing, only with the tornus too pronounced.

62. *Lithostege biernis* sp. nov.

♂, 32 mm. Palpus moderate. Antenna rather stout, lamellate, pubescent. Foretibia with both the claws highly developed, though the inner, as usual, is much the longer. Head and body fuscous.

Forewing not broad, costa straightish, apex moderately pointed; greyish fuscous, slightly glossy, but less so than in *Chesias*; proximal area, as far as the median band, more or less strongly irrorated with ochreous-brown; veins in distal area largely ochreous-brown, especially on the space just beyond the median band, where, moreover, they are marked with two rows of dark fuscous dots; median band darkest at its borders, where it is somewhat blackish-marked on the veins; at costa 5 mm. in width, its proximal edge from costa to cell oblique outward, its distal edge from R¹ oblique inward, its posterior part consequently quite narrow (on M only reaching between the bases of M¹ and M²); subterminal pale line strongly dentate; termen partly pale-mixed; terminal line slight, interrupted.—*Hindwing* rather glossy, nearly uniform greyish-fuscous.

Underside glossy fuscous, feebly marked. Forewing with the postmedian arising from a distinct dark costal dot; the costal margin distally paler, tinged with ochreous; a slender, interrupted terminal line. Hindwing with indications of a rather thick, curved postmedian line little beyond the middle.

Morocco: Casablanca, 1911. Type in coll. L. B. Prout, kindly presented by Monsieur P. Dognin.

Another link between *Chesias* and *Lithostege*, having the general coloration of the former, from which it differs in the less arched costa and the tibial claws.

SUBFAM. GEOMETRINAE.

63. *Mauna perquisita* sp. nov.

♀, 38–40 mm. Face dull reddish purple, with some greyer shading below. Palpus a little redder, at base beneath with some pale ochreous hairs. Vertex dull purplish; occiput olive-grey. Thorax above dull purple, with the “tegulae” mixed ochreous and rufous; beneath whitish, shaded in places with ochreous and roscate. Abdomen light ochreous-brown. Legs light ochreous-brown, mixed with roscate, the middle and hind femora and proximal part of hindtibia whitish on one side.

Forewing not very narrow, apex minutely produced, termen faintly waved; glossy, very variegated, the markings not sharply defined; prevailing tone dull grey-purple (formed of a blend of red-brown, pale violet, and sparser black scales), more ferruginous at base of costa, at apex, in posterior half of median area and

towards tornus; costal edge mostly brighter (more tawny), especially towards apex; ill-defined pale violaceous shades at costa proximally to postmedian line and at mid-termen; still fainter pale shades (with more of a tinge of olivaceous buff) in posterior half on each side of median area (in the paratype lighter and much more strongly developed); median line black, obscure, obsolescent posteriorly, oblique outward from costa at about one-fourth or rather beyond, joining a longitudinal shade across the median area behind M^2 ; postmedian from just beyond three-fourths costa, slightly incurved in posterior half, formed of a small but distinct blackish spot at costa and weaker dots or teeth on the veins (chiefly defined by the pale shading which accompanies it distally); no terminal line; fringe purple-grey.—*Hindwing* white, with a moderately broad, dull purple border, which is mostly about 4 mm. broad (but not quite sharply defined proximally), narrowing at tornus; fainter purplish shading costally; fringe whitish grey, tipped with white.

Both wings beneath more nearly as hindwing above, but with the white more broadly suffused with purplish anteriorly, border of forewing rather narrower and duller, costal margin of forewing bright yellow ochre with some minute purplish dots proximally and a larger one representing the postmedian.

Rhodesia: Shamva, December 19, 1917, type in coll. Brit. Museum; Salisbury, January 12, 1920, paratype in coll. L. B. Prout; both kindly presented by Rev. Father J. O'Neil.

A true *Mauna*, the forewing beneath being clothed—as in the type species, *filia* Cram. (= *acuminata* Walk., *scelestaria* Feld.)—with long, longitudinally appressed hair at the base of the costa and in the whole of the cell. This development is lacking in *ardescens* Prout and *electa* Prout, which perhaps require generic separation.

64. *Euexia percnopus aora* subsp. nov.

♂, 35–36 mm. Differs from *p. percnopus* Prout (NOV. Zool. xxii. 379) chiefly in shape and in its smaller size.

Forewing slightly narrowed, with costal margin faintly sinuous, termen appearing prominent at R^3 , the posterior half being subconcave.—*Hindwing* with termen very slightly bent in middle.

In colouring extremely variable, vinaceous cinnamon (type), drab or deep fawn-colour, the purplish admixture in the distal area and the olivaceous in the median equally inconstant.

Rhodesia: Shamva, December 1920, 3 ♂♂ submitted by Rev. Father J. O'Neil, type in coll. Brit. Museum, paratypes in coll. J. O'Neil et coll. L. B. Prout.

Here belongs also the specimen from Tanganyika Territory ("German East Africa") mentioned in the original description of *percnopus*. Its wing-margins being a little damaged, I did not notice its difference in shape and could not erect a race on a single example on account merely of smaller size.

65. *Xylopteryx o'neili* sp. nov.

♂, 40 mm. Head cream-white, with strong black irroration. Palpus white, the second joint on outer side and beneath black, the third (which is longer than in typical *Xylopteryx* and exposed) black at base beneath. Occiput black. Antenna irregularly spotted, black and white; the fascicles of cilia moderate,

slender. Thorax above predominantly black, patagia and pectus white; metathoracic crest deep black. Abdomen white, dorsally almost entirely clouded with purple-grey; dorsal crests undeveloped; anal end deep black, with spreading tufts of white hair. Legs white, the femora dotted, the tibiae and tarsi ringed with black; hindtibia not dilated.

Forewing with termen almost smooth; clouded over with purple-grey or red-grey, traversed by numerous excessively fine, interrupted black lines, the white ground-colour only showing in slight irroration, in costal and hindmarginal spots and dots (especially a triangular one at base of hindmargin), in irregular distal edging to the subbasal and antemedian lines, and especially in parts of the terminal area; markings broad, deep black; subbasal line thickest at costa (where it reaches base), oblique outward; antemedian from just beyond one-fourth costa, angled outward in cell, inward before fold, then oblique outward to hindmargin at 5 mm.; postmedian only conspicuous at costa and hindmargin, deeply excurved between the radials but mostly lost in a broad black band which reaches the subterminal; broad diffuse blackish median clouding from hindmargin to M, then running out behind M² to join the postmedian; subterminal white, slender, deeply dentate in middle, straightish anteriorly and posteriorly; distal area partly ochreous-brown mixed with white, crossed by an ill-defined black patch at R² and a second between the medians, the intervening spot (R³-M²) predominantly white; terminal interneural dots large, black, accompanied on the white fringe by black or grey shading.—*Hindwing* with termen very feebly crenulate; white, suffused (except costally) with light purple-grey; a black, proximally somewhat diffused, distally dentate, submarginal band of 2-3 mm. width, narrowing to tornus; a dot just proximal to it behind SM².

Forewing beneath white, suffused (except in distal area) with light bluish grey, which becomes darker and more strigulate in median area behind M and M²; costa dotted with black except in distal area; antemedian and postmedian lines present, finer and weaker than above; submarginal black band and its distal branch between the radials strong. Hindwing white, here and there (at costal margin more strongly) irrorated with black; submarginal black band strong.

S. Rhodesia: Salisbury, July 6, 1920 (Rev. Father J. O'Neil). Type in coll. Brit. Museum, kindly presented by the captor.

A striking species, agreeing structurally (except in third joint of palpus) with the genotype (*protearia* Guen.), but with the distal margins even more regular than in *arcuata* Walk., which it also more recalls in the white, dark-bordered hindwing and undersurface, but which has strong abdominal crests and DC¹ and DC⁴ of both wings shorter.

66. *Gonodontis breviata* sp. nov.

♂, 31 mm. Face cinnamon. Palpus formed about as in *Crocallis boisduvalaria* H. Luc.; mostly black-mixed, leaving only the tip conspicuously pale. Tongue slight. Vertex brown, the hair not forming a projecting tuft between the antennae; occiput paler. Thorax with slight anterior and posterior crests; wood-brown, above mixed with redder brown; abdomen mostly paler, brightest at anal end, above with very feeble dark spots. Legs irregularly spotted, the first two pairs predominantly dark, the posterior paler.

Forewing with costal margin shorter than typical, apex not produced, termen

even less oblique than in *C. boisduvalaria*, the crenulations moderately strong and the bend at R^3 appreciable; cinnamon, mixed, as far as postmedian line, with Mars brown and with some black irroration; antemedian line blackish, pale-edged proximally but not very sharp, oblique outward and sinuous from two-sevenths costa to near middle of hindmargin; cell-mark a black ring; postmedian black, slightly pale-edged distally, from costa at 2–3 mm. from apex to hindmargin close to tornus, slightly oblique inward to near R^2 , gently excurved between this and M^2 and again at SM^2 ; terminal interneural black dots slight or in part obsolescent; fringe in part slightly more reddish than distal area.—*Hindwing* only moderately elongate apically; ochreous whitish, becoming more fawn-coloured distally; black irroration only appreciable distally, nowhere heavy, unless along distal half of abdominal margin; no cell-spot; an incomplete dark, somewhat macular postmedian line starting in a thicker spot on abdominal margin at tornus, straight but oblique to R^3 , then incurved but almost obsolete; terminal dots subobsolete.

Underside light brown, the forewing, except costally and apically, whiter, the hindwing and costal region of forewing irrorated with black; a black cell-spot (not annular) on forewing and a weaker one on hindwing; both wings with a postmedian line of strong black vein-dots, on the forewing fairly straight, on the hindwing straighter than termen, thus ending close to tornus.

Kenya Colony: Kibwezi (W. Feather), October 26, 1917 (type ♂), November 4, 1918, a ♀ slightly larger and still broader winged, both in coll. Tring Museum.

Two larger, but otherwise identical, ♂♂ from Nairobi, March 29, 1911 (T. J. Anderson), are in coll. Brit. Museum.

67. *Gonodontis xera* sp. nov.

♀, 32 mm. Head and thorax very pale wood-brown, pectus and abdomen whiter. Akin to *aemoniaria* Swinh. (*Tr. Ent. Soc. Lond.* 1904, p. 527), much smaller; palpus shorter (little over 1) and with rather shorter hair; tongue weaker; antennal serrations longer (nearly 1).

Forewing: termen with the sinus between the teeth at R^1 and R^3 rather deeper than in *aemoniaria*; R^2 from rather before middle of DC; paler, the markings, excepting the blackish cell-spot (beneath larger and blacker than above) and terminal interneural dots or dashes, very weak, the postmedian apparently less acute at R^1 than in *aemoniaria*, the subapical costal spot obsolescent.—*Hindwing* white, above unmarked, beneath with a small grey cell-spot and very weak postmedian dots; termen with a few interneural dots anteriorly.

Kenya Colony: Kibwezi (W. Feather), November 22, 1916 (type), May 8, 1917, and December 22, 1918 (two other ♀♀), all in coll. Tring Museum.

68. *Chogada oligodranes* sp. nov.

♂♀, 34–37 mm. Like *acaciaria* Bdv. but smaller and with the ground-colour light brown (slightly tinged with ochreous) instead of white, the brown bands proximally to the antemedian and distally to the postmedian consequently less conspicuous.

Forewing with SC^{1+2} sometimes (1 ♂, 1 ♀) very shortly stalked instead of arising separately; antemedian and postmedian lines mostly only very finely dentate

(except costally), in general more approximated than in *acaciaria*, median line as variable as in that species.—*Hindwing* with median line generally stronger and straighter, sometimes more proximally placed; postmedian formed nearly as on forewing, in general less strongly bent in middle than in *acaciaria*.

Underside greyer and much more uniform in tone than in *acaciaria*, the cell-spots well darkened, the postmedian moderately (at least on forewing), the subterminal and terminal dark shades, on the other hand, obsolescent or quite inconspicuous.

Orange Free State: Thaba'nehu, January 1915 (G. Edelsten), 6 ♂♂, 1 ♀, in coll. L. B. Prout.

Variable; the female and one of the males have the central area of forewing and proximal part of hindwing heavily suffused with black-grey, especially on posterior part of forewing and anterior part of hindwing, this in large measure parallel to *acaciaria* ab. *fumata* Warr. It is just possible that *oligodranes* is an extremely well differentiated form of that remarkably variable species.

69. *Hyostomodes featheri* sp. nov.

♂ ♀, 21–24 mm. Head and body light brown, in places with an ochreous admixture; some blackish-fuscous irroration, strongest on head and legs; antenna dotted with blackish, in ♂ rather stout, serrate, the ciliation slightly over 1.

Forewing shorter and broader than in the type species and with termen more regularly curved (nearly of the shape of *Tephрина cinerascens* Butl.); SC^{1+2} coincident, commonly connected (occasionally anastomosing at a point) with C and connected with SC^{3+4} ; pale fawn-colour, mottled with cinnamon and with some scattered black irroration; the veins (except anteriorly to SC^3) conspicuously pale (cream-buff); antemedian line rather broad, ill-defined, at two-sevenths, whitish buff, excurved anteriorly, nearly vertical (slightly incurved) posteriorly, accompanied distally by a row of black spots; cell-mark long-oval, black, usually pale-centred; median shade cinnamon, usually more or less mixed with black; postmedian rather broad, whitish buff, from costa before two-thirds to hindmargin beyond two-thirds, sinuous (oblique outward from costa, gently incurved between the radials and very gently in posterior half); accompanied proximally, from costa to M^2 , by conspicuous black spots, which are separated only by the light veins; some black irroration or strigulation between the postmedian and the (almost obsolete) subterminal, also not continued behind M^2 ; terminal line scarcely darkened; a fine yellowish line at base of fringe.—*Hindwing* relatively rather ample, the termen (except for the weak sinus in middle) a little smoother than in the type species; less mottled with cinnamon than forewing; cell-spot smaller, not annular; antemedian wanting; postmedian less sinuous than on forewing, without the black spots; no strigulation beyond; termen and fringe as on forewing.

Underside duller, more densely and evenly irrorated with grey and blackish, the veins remaining clearer; antemedian line wanting; both wings with cell-spot and pale postmedian line, the latter accompanied distally by a very slight, but nearly complete, dark shade; terminal line (of interneural dark spots) better expressed than above; fringe as above.

Kenya Colony: Kibwezi, November 23, 1917 (1 ♂, 2 ♀♀), November 4–29,

1918 (1 ♂, 14 ♀♀), April 4-8, 1919 (9 ♀♀). In coll. Tring Museum, collected by W. Feather.

An elegant and very distinct little species. Both the males are somewhat worn.

70. *Hyostomodes zelota* sp. nov.

♂ ♀, 22-25 mm. Head ochreous-brown, with darker admixture; face ochreous-brown. Palpus $1\frac{1}{2}$, stout, heavily scaled; ochreous-brown. Vertex darker. Antenna of ♂ pectinate, with short branches ($1\frac{1}{2}$ to 2). Thorax light ochreous-brown, anteriorly dark purple-grey and with a band of the same colour across the patagia. Abdomen light ochreous-brown, with indistinct darker spots or belts dorsally and with paired black dorsal dots at the ends of the first few segments.

Forewing shaped nearly as in the preceding species; buff, in proximal half irregularly spotted or mottled with fuscous, in distal half with scattered atoms of the same; costal margin proximally dotted with blackish; a blackish subcostal dot close to base; antemedian line at little beyond one-fourth, nearly straight and erect, ochreous, almost entirely overlaid with blackish irroration, which thickens into dots on SC and at hindmargin; cell-dot black, moderately large; a thick median line (or narrow shade), anteriorly excurved just outside cell-dot, between M^1 and SM^2 gently incurved, mostly fuscous, but forming blackish spots at costa and hindmargin and with a ferruginous mark at base of R^3-M^1 ; postmedian just beyond two-thirds, nearly parallel with median, fine, ochreous, marked with black costally and more feebly at hindmargin and bearing a pair of subconfluent black spots between R^2 and M^1 ; an ill-defined, somewhat interrupted shade shortly beyond, bearing a pair of strong spots opposite those of the postmedian; termen with somewhat elongate, sharply blackish interneural spots; fringe very feebly mottled.—*Hindwing* with termen nearly smooth, only slightly more bent at R^3 than in a *Tephрина* and less rounded in front of the bend; slightly paler (at least proximally) than forewing, less strongly mottled; median line (or shade) strong, incurved anteriorly (well proximal to cell-dot); cell-dot moderately large; postmedian obsolescent, but with a small blackish spot between R^3 and M^1 ; the shade beyond well developed, straighter than termen forming spots at costa near apex and behind M^2 close to tornus; termen and fringe as on forewing.

Underside pale buff, with costal area (especially of forewing) brighter; forewing with fuscous proximal mottlings but without antemedian line; all the other markings of upperside reproduced in fuscous, more macular than above.

Kenya Colony: Kibwezi (W. Feather), December 12, 1916 (type ♂), April 21, 1919 (1 ♂); March, April, and November 1917, May, November, and December 1918, April and May 1919 (9 ♀♀). In coll. Tring Museum.

Evidently variable; the second ♂ has all the markings darker and heavier and the distal area tinged with fawn-colour; only one ♀ resembles the ♂♂ in ground-colour, all the rest are more or less strongly tinged on the upperside with fawn-colour.

71. *Milocera divorsa* sp. nov.

♂ ♀, 25-28 mm. Nearly akin to *diffusata* Warr. (Nov. Zool. ix, 528, as *Azata*). Face mixed with black. Upperside of palpus black at ends of second and third joints. Pectination of ♂ less long? (apparently scarcely 1, but damaged).

Forewing with costa more markedly arched; colour appearing darker, especially in the ♂, in which the light ochreous-brown colour is almost covered with dark irroration, mostly laid on in innumerable transverse striations (in ♀ the irroration more scattered, yet coarse and strong); cell-dot and lines fairly distinct, antemedian strongly excurved, postmedian rather oblique outward from two-thirds hindmargin, about middle of wing beginning to curve so as to become gradually more oblique, about SC^1 (near the apex) acutely angled and retracted, becoming indistinct; a rather distinct dark grey shade (thick line) running obliquely from tornus so as almost to meet the postmedian about R^2 , then recurved so as to run parallel with it but becoming indistinct; terminal area outside this curved shade mostly paler, conspicuously so in middle and on undersurface; termen with rather strong, slightly elongate black interneural dots; a fine pale line at base of fringe.—*Hindwing* with termen in ♂ considerably more convex than in *diffusata*, rather full in middle; cell-dot more proximal than on forewing; postmedian about central, straight; succeeding grey shade strongly sinuous, arising from abdominal margin near tornus, rather deeply incurved between the radials; outer pale shading stronger proximally than distally; a rather dark apical shade.

Underside similar, rather lighter.

Cameroons: Bitye, Ja River. ♂ type in coll. Deutsch. Ent. Mus., paratype in coll. Joicey; ♀ allotype in coll. L. B. Prout.

Milocera Swinh., with the coincident SC^{1+2} arising from stalk of SC^{3+5} and anastomosing shortly (or connected) with C, embraces provisionally the type (*horaria* Swinh., *Tr. Ent. Soc. Lond.* 1904, p. 522), *arcifera* Hmps. (*Proc. Zool. Soc. Lond.* 1910, p. 469), *diffusata* Warr, and the new species. The two last-named have less falcate forewing, less long cells, M^1 of both wings arising nearer R^3 . In the ♀ of *divorsa* the base of SC^{1+2} is obsolete, leaving it to arise out of C.

72. *Melinoëssa horni* sp. nov.

♂, 44–45 mm. Head, body, and legs yellow, beneath mostly white. Face with a broad irregular transverse red-brown band below middle, from which a streak projects upwards on either side, almost meeting some dots at upper edge. Second joint of palpus with some red-brown admixture on outer side, at least at extremity; third joint mostly black-grey. Vertex mixed with black-grey, a few red-brown hairs between this and the yellow occiput. Thorax in front with the usual dark anterior band.

Forewing shaped and marked nearly as *croesaria* H.–Sch.* (= *sodaliata* Walk., *costalis* Walk.); lighter yellow, the reddish admixture being restricted to comparatively sparse, though well distributed, dots and strigulae; a very small dark cell-dot, in place of the large white-pupilled ocellus of *croesaria*; the red-brown lines rather distinct, not mixed with grey; the postmedian posteriorly vertical or slightly oblique inward; subterminal silvery dots small, the one behind R^3 not or scarcely larger than the others.—*Hindwing* with termen between SC^2 and M^2 much less convex than in *croesaria*, recalling the shape of *stellata* Butl.; cell-dot

* Herrich-Schaeffer's figure (*Samml. Aussercur. Schmett. i.* fig. 370), if accurately drawn, represents a rare aberration with the postmedian line rather more proximally placed, its angle at R^3 not reaching the silvery subterminal spot.

almost or quite obsolete; postmedian line almost straight, from costa a little beyond middle to abdominal margin at nearly two-thirds; subterminal as on forewing.

Underside also yellower than in *croesaria*, the hindwing little whiter than the forewing; distal dark shades narrower, farther from termen; no differentiated whitish patch at midtermen; line of upperside reproduced.

Cameroons: Bitje, Ja River, in October; type in coll. Deutsch. Ent. Mus.; paratype (damaged) in coll. Joicey.

♀ much more orange (more densely irrorated), though still less reddish than in *croesaria*. Bitje, October–November 1912, in coll. Joicey et coll. Tring Museum; Sierra Leone (D. Cator), in coll. Brit. Museum; Nigeria: Warri, April 1897 (Dr. Roth), in coll. Tring Museum.

Dedicated to Dr. Walther Horn, the director of the Deutsch. Ent. Mus., to whom I am indebted for the opportunity of working out some of its Geometrid material and retaining the duplicates.

73. *Melinoëssa midas* sp. nov.

♂, 46–48 mm. Larger than *croesaria* H.–Sch. Lighter ochreous, the reddish irroration and strigulae being rather less bright and much less dense.

Forewing with the lines rather well developed; subterminal silvery spots smaller, the longest one (behind R^2) narrower (more lunular or comma-shaped) than in *croesaria*, the rest very small, but with a firmer, more continuous (though very fine) dark line distally.—*Hindwing* with cell-dot almost obsolete; postmedian line more distinct (at least anteriorly) than in *croesaria*, more weakly angled in the middle; subterminal corresponding to that of forewing, reaching abdominal margin at tornus (in *croesaria* just proximally to tornus).

Both wings beneath with the dark submarginal shades much narrower than in *croesaria*.

Cameroons; Bitje, Ja River, 2,000 ft., November 1907, wet season, type ♂ in coll. L. B. Prout; also two other ♂♂, undated.

74. *Zamarada dorsiplaga* sp. nov.

♀, 30 mm. Face and upperside of palpus spotted with black. Vertex and thorax above pale lilac-grey, slightly dotted with black. Abdomen above with the ground-colour pale grey, but with a large black patch occupying the greater part of the second, third, and fourth somites, leaving free the slight mediodorsal crests; fifth, sixth, and seventh somites narrowly belted with black posteriorly. Body beneath pale.

Wings superficially recalling a large *secutaria* Guen., but with the hyaline part and its dark-grey irroration slightly more olive-tinted.

Forewing with cell-spot less large, with only a few pale scales in its centre, the median shade arising from a stronger black costal spot, very strongly bent outward anteriorly (running along vein R^1), thus nearer to the postmedian from R^1 to hindmargin, somewhat thickened and blackened at hindmargin, the postmedian black line more dentate, with a shallower sinus between R^2 and M^2 , the distal area more narrowly and less brightly shaded with brown proximally to the subterminal, the black triangular markings (and a sinuous mark between M^1 and hindmargin) proximal to the subterminal on the other hand strong.—

Hindwing with the cell-dot rather stronger than in *secutaria*, median shade thicker and more black-mixed, postmedian line and markings beyond nearly as on forewing, but with the sinuous black mark towards tornus mostly obsolete.

Underside more uniformly dark bordered than in typical *secutaria*.

S. Rhodesia: Salisbury, August 1, 1918 (Rev. J. O'Neil). Type in coll. Brit. Museum, presented by the captor.

75. *Zamarada densisparsa* sp. nov.

♂, 24 mm.; ♀, 30-32 mm. Head and body pale brownish-grey or violet-grey, above with some dark irroration (rather dense on abdomen except at the incisions) and with some slight ochreous shades in places. Hindtibia in ♂ somewhat dilated.

Wings of the same texture as in the other species, very pale brownish with a somewhat olivaceous hue and sprinkled with fine but dense violet-grey irroration and strigulation.

Forewing with costal margin ochreous, heavily spotted with lustrous violet-grey; cell-dot small; a narrow violet-grey distal border, measuring only $1\frac{1}{2}$ or 2 mm. at its broadest parts, somewhat sinuous-edged proximally (but not or only feebly dentate), the posterior sinus long (commencing about R^2) but very shallow.

—*Hindwing* with similar cell-dot and distal border.

Underside with the ochreous costa less spotted, the cell-dots obsolescent, the distal borders darker grey.

S. Rhodesia: Salisbury, July 24, 1918, type ♂ in coll. Brit. Museum, other specimens in coll. L. B. Prout, coll. A. J. T. Janse, and coll. J. O'Neil, all collected by Father O'Neil.

Distinguished from narrow-bordered *aclea* Prout by the coloration and irroration.

